Revision 0–10

Revision

Over the coming days your child will be revising work done in Senior Infants (pages 1–5 of the pupil's book) on the numerals/numbers 0–10, sets/groups of 10, addition with totals to 10, observing sets that have more or less than a given set and performing simple shopping activities with totals to 10 cent.

Counting to 10

Place 10 objects that are to hand (spools, beads, spoons, counters, cups) on the table and ask your child to count them forwards and backwards.

Poem about counting

Revise or sing the following poem with your child.

Ten Green Bottles

Ten green bottles hanging on the wall,
Ten green bottles hanging on the wall,
And if one green bottle should accidentally fall,
There will be nine green bottles hanging on the wall.

Continue all the way down to:
One green bottle hanging on the wall,
One green bottle hanging on the wall,
And if one green bottle should accidentally fall,
There will be no green bottles hanging on the wall.

Game: What's my number?

Have your child stand with his/her back to you. You trace any one of the numbers 0–10 on his/her back. The object of the game is for your child to guess what the number is. When your child answers correctly, s/he gets the opportunity to trace one of the numbers 0–5 on your back.

More or less?

Place some cups/saucers/toys/cubes or buttons on the table. Separate them into two groups of items – any items to hand will do. Have eight cups in one section on the table and six saucers in another. Ask your child to estimate (guess) how many cups/saucers there are. Then ask him/her to count them and see if their estimate was correct.

Now ask questions such as: *How many cups are there? How many saucers are there? Are there more or less/fewer cups than saucers? How many more saucers are needed to have the same amount/number of cups?*
If your child is having difficulty with this, place the cups in a line and then place the saucers underneath them. In this way your child should see that there are two saucers fewer than cups.

Adding to 10

Place six cups/pens/pencils/toys/mugs/spoons or buttons, etc. on the kitchen table in a set. Place another three cups/pens/pencils/toys/mugs/spoons or buttons on the table. Ask: *How many cups have we in the first set? How many have we in the second set? How many cups have we altogether?* Show that 6 and 3 make 9 or 6 and 3 is the same as 9 or 6 + 3 = 9.

Do this with as many items as you can find around the house.

Partitioning sets

Partitioning sets is where you place some buttons, etc. on the table and use a pencil/chopstick/straw to divide the set into two smaller sets (subsets).

Game 1: Matching coins

Collect as many 1c, 2c, 5c and 10c coins as you can. Place them in a pile in the centre of the table. Give your child four cups or plastic cups, etc., as done in Senior Infants. Ask your child to sort the coins into the cups/plastic cups.

Game 2: Shop

Ask your child to help you make a play shop in a section of a room in the house. Collect a number of easily sourced items. Use Post-it notes or pieces of paper as price tags. Place the price tags on or under the items. No item should cost more than 10c. Ask your child to make up some questions.

CJFallon

Numbers 10–15

Your child will be dealing with the numbers 10–15 (pages 6–14 of the pupil's book) over the coming days.

Counting to 15: Arms up, arms down!

Play this game with your child. You put your/their arms up in the air when you say 1 and put your/their arms down when you say 2, etc. until you reach the target number of 15. This can be extended to 20.

Variation: It is important that your child is able to count backwards from 15 as well as forwards. Have him/her count backwards from 15 to 1. When s/he gets to 1, s/he starts at 15 again.

Counting objects

Place 15 objects that are to hand (spools, beads, spoons, counters, cups) on the table and ask your child to count them forwards and backwards.

Numbers/numerals 10–15: Four-handed teens

Work with your child to make the numbers 11–15 with your hands. You can hold up both hands to make 10 with your fingers. Your child holds up 1–5 to make the units. If you have a mobile phone camera, you could take a photo of some of the representations of numbers 10–15, and refer to them now and again. Your child could also make numeral cards to go with each representation or write the numerals on pieces of paper/cardboard or Post-it notes.

Combining sets (Addition)

Place some cubes, etc. on the table. Ask your child to make a set of seven red cubes and a set of six blue cubes. Place some twine or thread around each set to highlight it. Ask:

- *How many cubes have we in this set? (left-hand side) (yes, seven)*
- *How many cubes have we in the set on the right-hand side? (yes, six)*
- *How many cubes have we altogether? (yes, 13)*

So, 7 and 6 make 13 or 7 and 6 is the same as 13 or 7 + 6 = 13.

Place 14 cubes on the table in three separate sets, like in the two sets above. Ask:

- *How many cubes are in the first set? (yes, six)*
- *How many cubes are in the second/middle set? (yes, five)*
- *How many cubes are in the last set? (yes, three)*

So, 6 and 5 and 3 make 14 or 6 and 5 and 3 is the same as 14 or 6 + 5 + 3 = 14.
This can be done with a range of two and three sets of common objects.

Partitioning sets (Addition)

Place 14 cubes, etc. on the table. Place a piece of string or thread around the cubes to show a set. Ask your child to tell you how many cubes there are altogether. Now place a pencil/chopstick/lollipop stick or straw across the set to show that 14 is broken into smaller sets (subsets) of 8 and 6. Ask:

- *How many cubes are there on this side (left hand)? (yes, eight)*
- *How many cubes are there on this side (right hand)? (yes, six)*

So, 14 is the same as 8 and 6 or 14 makes 8 and 6 or 14 = 8 + 6.

Place 15 buttons/spoons, etc. on the table. Now place a pencil across the set to show that 15 is broken into smaller sets (subsets) of 7 and 5 and 3. Ask:

- *How many buttons are on this side (left hand)? (yes, seven)*
- *How many buttons are in the middle part (subset)? (yes, five)*
- *How many buttons are on this side (right hand)? (yes, three)*

So, 15 is the same as 7 and 5 and 3 or 15 makes 7 and 5 and 3 or 15 = 7 + 5 + 3.
You can do this with a number of different sets of two and three using a variety of items.

2-D Shapes

2-D shapes

Over the coming days your child will be learning about 2-D shapes, i.e. shapes with only two dimensions – length and width/breadth (pages 15–17). These shapes will be introduced by means of games and concrete materials. S/he needs to know some of the mathematical language associated with the 2-D shapes: names of the five shapes – square, rectangle, triangle, circle and semi-circle (semi-circle is new to First Class) – straight side, curved side, flat face, corner, etc.

2-D shapes around us

Collect or point out to your child some shapes around the house or in the environment that come in these shapes: square, rectangle, triangle, circle and semi-circle. Emphasise that we are only looking for the shape at the front, not the 3-D shape.

Square: It has one flat face with four straight sides of equal length. It has four corners. For example: sides of some boxes, some floor/bathroom tiles, some tabletops, some flowerbeds, some picture frames, windowpanes, etc.
Rectangle: It has one flat face with the opposite sides of equal length and four corners. For example: most cereal packets, shoeboxes, pencil cases, books, television/computer screens, windowpanes, doors/door panels, (technically they are 3-D shapes as they have depth/thickness. Here we are just dealing with the front of them.), some tabletops, some floor/bathroom tiles, picture frames, fridges, freezers, skylights, photos, chair seats, etc.
Circle: It has one flat face, one curved side and no corners. For example: clock faces, some windowpanes, shapes on buildings, five circles in the Olympic Games flag, STOP sign, medals, traffic signals, lollipop person's sign, hula hoops, cooker rings, mugs, cups, pots, pans, etc.
Triangle: It has one flat face, three straight sides and three corners. For example: ends of a Toblerone bar, YIELD sign, snooker ball holder.
Semi-circle: It is half of a full circle. It has one flat face, two sides and no corners. For example: half-moon, protractor.

Note: For this exercise, corners can only be made by the meeting of two straight lines.

Everyday shapes

Show your child various familiar objects around the house or locality that have common 2-D outlines. For example, circles: an orange, a football, clock, paper plate, etc. Place each object against a sheet of paper and trace around the object. When the object is removed, your child should clearly see the 2-D outline.

Making shapes

Ask your child to draw or construct squares, rectangles, triangles, circles and semi-circles using a variety of media, e.g. geoboards, paper, márla, lollipop sticks, pipe cleaners, cubes, counters, thread, twine, etc.

Poem about shapes

Read or sing the following poem/song.

Shape Song

(Sung to the tune of 'The Farmer in the Dell')

A circle's like a ball,
A circle's like a ball,
Round and round
It never stops.
A circle's like a ball!

A square is like a box,
A square is like a box,
It has four sides,
They are the same.
A square is like a box!

A triangle has 3 sides,
A triangle has 3 sides,
Up the mountain,
Down, and back.
A triangle has 3 sides!

A rectangle has 4 sides,
A rectangle has 4 sides,
Two are long, and
Two are short.
A rectangle has 4 sides!

Sing the song again and ask your child to make each shape using his/her arms or fingers as s/he sings about it.

Table tips/Addition

Table tips 1 and 2

Over the coming days your child will be learning some table tips to help him/her add faster and with greater understanding (pages 19–23). S/he needs to know the mathematical language associated with these table tips: making a ten, a double (4 + 4; 5 + 5, etc.), how many?, counters, frame, full, empty, write, number sentence (6 + 6 = 12 is a number sentence), etc.

Making a ten: the ten frame

Draw a ten frame on some paper, as shown below.

Ten Frame

The ten frame should be about 8cm x 20cm. Give your child 10 coins of any denomination or use buttons, counters, shells, etc. Place one counter on the ten frame and ask:

- *How many spaces are there altogether?*
- *How many places are full/empty?*
- *Can you give me a number sentence for the one counter? (yes, 1 and 9 make 10 or 1 + 9 = 10)*

Now place two counters on the ten frame. It is better to work along the top line first so that your child can work out the pattern more easily. Ask:

- *How many spaces are on the ten frame?*
- *How many spaces are full/empty now?*
- *Can you give me a number sentence for the two counters? (yes, 2 and 8 make 10 or 2 + 8 = 10)*

Do the same with all the other combinations of two numbers that add up to 10.

The doubles

Give your child 7 red and 7 green cubes/conkers/ buttons/markers/pencils, etc. (Any two colours will suffice.) Have them arrange the buttons as 1 red and 1 green. Ask:

- *What have we here? (yes, 1 and 1 make 2 or 1 + 1 = 2)*

Have your child arrange the buttons into 2 red/2 green; 3 red/3 green; 4 red/4 green; 5 red/5 green, etc., as at the top of page 20 of the pupil's book. Your child should now be able to say all the doubles, which are all even numbers up to 14. These can be learned now by rote as s/he has already worked out the pattern using counters/cubes, etc.

Adding using the doubles and making a ten

Encourage your child to look for a double or two numbers that make a ten, when doing his/her sums.
For example:
4 + 7 + 4 = ?
Adding the 4 and 4 gives 8. Then add the 7.

7 + 5 + 3 = ?
Adding the 7 and 3 gives 10. Then add the 5.

The commutative law

The commutative law is simply that 6 + 7 is the same as 7 + 6. Give your child some counters, cubes, etc. Call out a number of cubes, e.g. 7 red cubes. Your child should place seven red cubes in a row. Now call out another number of cubes, e.g. 6 blue cubes. Your child should place 6 blue cubes in a row. Ask:

- *How many red cubes are there? (yes, seven)*
- *How many blue cubes are there? (yes, six)*
- *How many cubes are there altogether? (yes, 13)*

Now ask your child to show 7 blue and 6 red cubes on the table. It is best if the original set of 7 red and 6 blue cubes could remain on the table so that your child can clearly see that the two sets of 7 red and 6 blue cubes have the same total as 7 blue and 6 red cubes. This can be done with a number of different sets of two addends (a number to be added to another) to emphasise that it really doesn't matter which of the numbers you add first – the answer will always be the same.

CJFallon

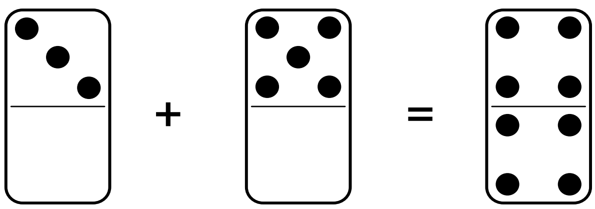
Subtraction

Your child will be learning about subtraction as complementary addition over the coming days. This will be done by means of games, poems, songs and activities using concrete materials, such as dominoes and regular playing cards. Complementary addition simply means that your child does the subtraction as if doing an addition sum, e.g. 3 + ____ = 7. The answer can be achieved by taking 3 away from 7 to give 4, or simply ask: What must I add to 3 to make/get 7? S/he needs to know the mathematical language associated with subtraction as complementary addition: addition, add, subtraction, subtract, take away, plus sign/symbol (+), equals sign (=).

The hidden domino

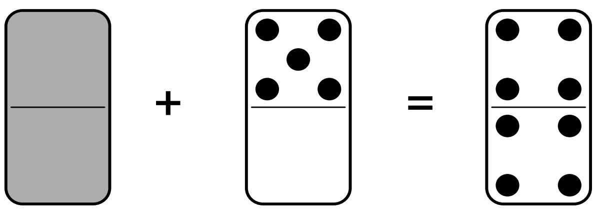
Give your child a box of dominoes or draw some dominoes on Post-it notes or a piece of paper or cardboard. Ask your child to find all the dominoes that only show one number (1–6).
Place them in a group to the left of the table. These can be used as the addends for each sum (see pictures below). Now ask your child to find the dominoes that have totals from 7 to 12. These can be used as the totals (answers) for each sum.

Ask your child to make some number sentences using the dominoes or make up a question yourself. For example:



3 + 5 = 8

Your child can put the correct numeral under each domino. Now ask your child to turn the three-dot domino upside down. For example:



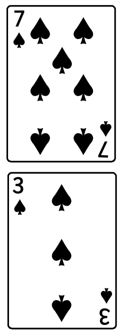
You can ask the following questions:

- *What number domino is turned upside down?*
- *Can you tell me how we can work out what the number is?*

This can be done with several number sentences. Your child can make his/her own questions where one domino number is hidden.

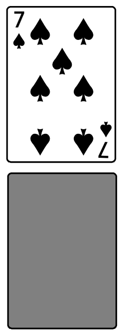
The hidden card

Give your child a packet of regular playing cards. Ask him/her to remove all the court (picture) cards. The joker can be used as zero. Using all the suits (numerals) from 1 to 10, ask your child to make some complementary addition sums. As with the dominoes, ask your child to place a playing card number sentence on the table. For example:



7
+ 3
10

Now ask him/her to turn the 3 card upside down.



7
+ 3
10

Ask: *What number is turned upside down?* Continue as you did with the dominoes.

Ordinal number/Pattern/Subtraction

Ordinal number

Your child will be learning about ordinal number, pattern and subtraction as difference and deduction over the coming days. Ordinal number shows the order of people or items: first, second, third, fourth, fifth, sixth, seventh, eighth, ninth and tenth. This will be done by means of games, poems and songs.

Game 1: Order of teddies

Place 10 teddies or any toys to hand on the table in a row. It would be ideal if they were in a variety of colours. Ask your child to call them out in order, starting with the first one. Write the words first to tenth on cards or Post-it notes. Ask your child to now place the proper Post-it note under each toy. Ask questions such as: What colour is the toy in first place? In which place is the red toy, etc.

Game 2: Swap places

Ask your child to place the toys in order again from first to tenth. Now get him/her to change the order of the toys. For example:

- *In what place is the red car?*
- *Change the car so that it is in fifth place.*
- *Change the teddy so that it is now in first place.*
- *In what place is the yellow doll now?*

Continue with this type of questioning.

Game 3: Build a story

Ask your children to recount the main parts of a familiar story such as 'Goldilocks and the Three Bears'. For example: First, Goldilocks got lost in the woods. Second, she saw a cottage. Third, she knocked on the cottage door and waited a short while. Your child can 'build' the story, using the ordinal numbers from the Post-it notes used above.

Pattern

Give your children 6/8/10 socks. Encourage him/her to count the number of socks out loud. Invite him/her to 'make pairs' (matches) of socks. Explain that if each sock has a match, the given number is even. If a sock is left alone, the number is odd. When all the socks have been matched, ask your child: How many pairs of socks did you make? Did each sock have a match? Were there any socks left over? Is 6 an odd or even number? Repeat the same activity, with a variety of both odd and even numbers of socks. This activity can also be done using cups, saucers, fridge magnets or other items that may be to hand.

Subtraction as difference

In this section of the pupil's book your child is asked to look carefully at two sets of items and to decide which set has more/less. Your child is also asked to complete a subtraction number sentence (sum) using the minus (–) sign, e.g.
15 – 9 = 6.

Ask your child to place a row of 10 apples in a line across the table. S/he can now place a row of eight apples in one-to-one correspondence underneath the top row of apples.

It should be obvious from placing the apples that there are two more apples in the top row. You can ask questions such as:

- *How many apples are in the top/bottom row?*
- *Which row has more apples?*
- *Which row has fewer/less apples?*
- *How many more apples are in the top row?*
- *How many fewer apples are in the bottom row?*

Subtraction as deduction

The word deduction simply means to take away.
We take away by using the minus (–) sign. Say the following number story: *There are 8 counters on the table. I want to take away 3 counters. How many counters are left*?
Place 8 counters or anything else to hand on the table. Ask: *How many counters are there?* Ask your child to physically take away 3 counters from the 8 that are on the table. *How many counters did you take away? How many counters are left on the table?*

Explain to your child that the long number story above can be written in a short number sentence 8 – 3 = 5. (Place all numerals in boxes.) Make up several number stories and ask your child to make/write a number sentence for each number story. Ask your child to make up some number stories by himself/herself and to make the corresponding number sentences.

CJFallon

Spatial awareness

Your child will be learning about spatial awareness over the coming days. Spatial awareness is an awareness of the position of items around us. This will be done by means of games, poems, etc. Your child needs to be aware of some of the language of spatial awareness: underneath, between, on top of, through, around, above, inside, in, top, bottom, left, right, etc.

Game 1: Simple Simon says

This is a simple game that has been adapted slightly to include the language of spatial awareness. Give your child a small object, e.g. an eraser/parer/cube.
When your child hears the instruction *Simple Simon says…*, s/he must follow that instruction.
If *Simple Simon says* is not said, s/he must not carry out the instruction! If s/he does carry out the instruction without *Simple Simon says*, s/he is out and the game starts again. (This game works best if two or more family members play.) Here are some sample instructions.

Simple Simon says: Put your eraser/parer/ cube…'
- *on top of your head*
- *under your chair*
- *on your desk*
- *in your pocket/school bag*
- *between your chin and chest*
- *inside your fist*

Extension work

Invite your child to place the cube, etc.
- on top of the television
- under the window
- between the bag and the chair
- beside the sofa
- inside the bin/box/envelope
- in the pocket/barrel
- above the fireplace
- behind the chair, etc.

To teach and practise this language, give your child a beanbag (or any object of your choice). Write the following words on cardboard or A4 paper: on top of, underneath, above, below, beside, near, behind, between, in front of.

Give your child all the words on the paper/flashcards. Call out the following actions that you are going to do. Ask your child to hold up the relevant flashcard for the action that you are doing.
- *I put the beanbag* **on top of** *my head.*
- *I put the beanbag* **underneath/above** *my desk.*
- *I am holding the beanbag* **below** *my chin.*
- *I put the beanbag* **beside** *your school bag.*
- *I put the beanbag* **near** *my foot.*
- *I put the beanbag* **behind** *my back.*
- *I put the beanbag* **between** *my two feet.*
- *I am holding the beanbag* **in front** *of my nose.*

Get your child to give similar instructions for you to carry out.

Note: The words **on** and **above** can often be confused by children.
- *An object that is* **on** *the table sits on the table.*
- *An object that is* **above** *the table does not actually touch the table.*

Game 2: Floating bubbles

Get or make a bottle of blowing bubbles using washing-up liquid. Carefully blow one bubble at a time. Encourage your child to describe where the bubble lands. For example: It landed on top of the shelf. It landed beside the television.
To help your child's language development, ask for more details where possible.

Game 3: Left and right

Call out the following instructions to help your child practise identifying their left from their right:
- *Raise your left/right hand.*
- *Stand on your left/right foot.*
- *Put your left hand on your head.*
- *Put your right hand on your hip.*
- *Touch your right ear.*
- *Close your left eye, etc.*

Numbers/numerals 15–20

Your child will be dealing with the numerals/numbers 15–20 over the next few days.

Game 1: Four-handed teens

Work with your child to make the numbers 15–20, as done earlier in the year with the numerals/numbers 10–15. You can hold up both hands to make 10 with your fingers. Ask your child to hold up 1–10 to make the units. If you have a mobile phone camera, you could take a photo of some of the representations of numbers 10–20, and refer to them now and again. Your child could also make numeral cards to go with each representation, or write the numerals on pieces of paper/cardboard or Post-it notes.

Game 2: Arms up, arms down

Ask your child to stand up and begin counting 1–20. S/he must put his/her arms up in the air when saying 1 and put his/her arms down when saying 2, etc. until s/he reaches the target number 20.

Variation: Place 20 items on the table. Write the numbers 1–20 on separate pieces of paper or Post-it notes. Place the relevant Post-it note under each item on the table. In this instance, we will put the emphasis on the numerals 15–20. Ask your child to count forwards and backwards, paying particular attention to the written numeral/number.

Game 3: Beat on the drum

Beat on a percussion instrument or biscuit tin lid, etc. up to a maximum of 20 times. Have your child decide the number of times the percussion instrument was hit. Ask your child to write the number/numeral in his/her copybook. Place more emphasis on the numerals 15–20 than on the earlier numerals.

Combining sets (Addition)

Place some cubes, etc. on the table. Ask your child to make a set of eight red cubes and a set of nine blue cubes. Place some twine or thread around each set to highlight it.

Ask:

- *How many cubes have we in this set? (left-hand side) (yes, eight)*
- *How many cubes have we in the set on the right-hand side? (yes, nine)*
- *How many cubes have we altogether? (yes, 17)*

So, 8 and 9 make 17 or 8 and 9 is the same as 17 or $8 + 9 = 17$.

Place 18 cubes, etc. on the table in three separate sets, as done with the two sets above.

- *How many cubes are in the first set? (yes, seven)*
- *How many cubes are in the second/middle set? (yes, eight)*
- *How many cubes are in the last set? (yes, three)*

So, 7 and 8 and 3 make 18 or 7 and 8 and 3 is the same as 18 or $7 + 8 + 3 = 18$. This can be done with a range of two and three sets of common objects.

Partitioning sets (Addition)

Place 18 cubes, etc. on the table. Place a piece of string or thread around the cubes to show a set. Ask your child to tell you how many cubes there are altogether. Now place a pencil/chopstick/lollipop stick or straw across the set to show that 18 is broken into smaller sets (subsets) of 11 and 7.

- *How many cubes are on this side (left hand)? (yes, 11)*
- *How many cubes are on this side (right hand)? (yes, seven)*

So, 7 and 11 make 18 or 7 and 11 is the same as 18 or $7 + 11 = 18$.

Place 17 cubes, etc. on the table. Place a piece of string or thread around the cubes to show a set. Ask your child to tell you how many cubes there are altogether. Now place a pencil across the set to show that 17 is broken into smaller sets (subsets) of 6 and 7 and 4.

So, 17 is the same as 6 and 7 and 4 or 17 makes 6 and 7 and 4 or $17 = 6 + 7 + 4$.
You can do this with a number of different sets of two and three using a variety of items.

Money – coins

Your child will be revising work done in Senior Infants on 1c, 2c, 5c and 10c coins over the coming days. They will also deal with length (metre). This will be done by means of games, poems, songs and activities using concrete materials. Your child needs to know the mathematical language associated with money: dear, expensive, cheap, cheaper, how many, count, money, brown, copper, yellow, what colour is a ___ coin?, long, longer, not as long, nearly/about as long, etc.

Price tags

Get your child to make some price tags for items with prices up to 15c only. Put the price tags on a range of items in the house, e.g. beans, peas, potatoes, carrots, bananas, etc. Give your child some real coins from 1c to 10c. Ask some or all of the following questions. There will be a number of answers for some questions, which should lead to discussion.

- *What item is the dearest/most expensive?*
- *What item is the cheapest/least expensive?*
- *Which items are the same price?*
- *How much dearer is the book than the carrot?*
- *How much cheaper is the orange than the beans?*
- *Which two items together cost the same as the biro?*
- *Which two items together cost the same as the book?*
- *Which three items together cost the same as the grapes?*

Have your child act as the shopkeeper and you as the shopper. Have him/her add the totals of the purchases and give the correct change. Then reverse the roles.

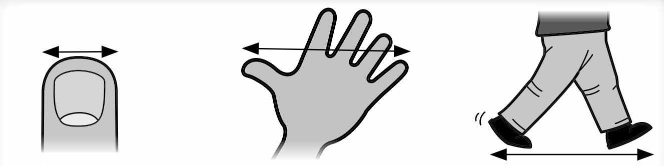
Game 1: As long as!

The aim of this activity is to revise the language of length, which has been taught in the infant classes. Hold up a pencil. Ask your child to find something that is longer/shorter/wider/narrower (thinner) than the pencil. Hold up a shopping bag. Ask the child to find something that is wider/narrower/taller/shorter than the bag.

Continue the activity with other items.

Fingers, spans, strides

Discuss with your child the pictures of the fingertip, span and stride on page 49 of the pupil's book. Invite him/her to show these units of measure to you. Ask him/her to demonstrate how each of these units can be used to measure objects. As s/he demonstrates, ensure s/he is measuring correctly, i.e. leaving no gaps or spaces between fingertips/spans/strides.



Make a metre

Your child will need a metre measure in order to complete the activities on pages 52 and 53 of the pupil's book in school or at home. Measure out lengths of wool or cardboard against a metre stick. If using wool, tell your child not to pull on it too tightly or else the measure will be greater than a metre – it will stretch!

Place the metre string or stick on the table and ask your child to measure out the number of pencils, maths books, crayons, school bags and lollipop sticks, etc. which can fit along their metre string/strip. Encourage your child to estimate before s/he measures the actual number of items. Using their metre strings/strips, ask your child to find objects in the kitchen, bedroom, garden, etc. that measure **less than** a metre, **about a** metre and **more than** a metre.

Extension work

Ask your child to measure the lengths, widths and heights of a variety of objects around the house, e.g. a chair, radiator, window, sofa, television, bed, mirror, chest of drawers, carpet, dog kennel, vegetable patch, clothes line, garden shed, etc.

Note: When measuring, explain to your child that his/her measures may not be exact. For example: If the window measures slightly more than 2 metres, tell him/her that the window is about 2 metres wide.

Doubles, near doubles and making a ten

Over the next number of days, your child will be dealing with the doubles, near doubles, making a ten and problem-solving within 20. S/he needs to know the necessary language. Two identical numbers, e.g. 4 + 4 = ?, are called doubles. Research shows that children find it easy to remember these doubles. Near doubles are numbers such as 5 + 4 = ? or 4 + 5 = ? Research also shows that children find it easy to make a ten, e.g. 7 + 3 = 10 / 8 + 2 = 10, etc.

The doubles

This activity is a revision of work done earlier on the doubles. Give your child up to 10 red and 10 green cubes/counters/shells/buttons/spools/ multi-links etc. (Any two colours will suffice.) Have him/her arrange the cubes as 1 red and 1 green and ask: What have we here? (yes, 1 and 1 make 2 or 1 + 1 = 2)

Have him/her arrange the cubes into 2 red/2 green and 3 red/3 green, etc. Your child should now be able to say all the doubles, which are even numbers up to 20. These can be learned now by rote as your child has already worked out the pattern using counters/cubes, etc.

The near doubles

Write the number sentence 4 + 5 = ? on a piece of paper or in your child's copybook. Now ask him/her to use cubes, etc. to show this number sentence.

Ask your child if they can work out a strategy to add 4 + 5 = ? Discuss the different strategies. A good strategy is: 4 red and 4 green cubes placed in separate vertical rows with the extra 1 green cube being added to the green row.

$$4 + 5 = 4 + 4 + 1$$

Games: What's my name

Play the game 'What's my name?' with your child. You can make up as many of these as you like as long as your child retains an interest. Try to make it a fun exercise!

Game 1

I am an even number.
I have two digits.
I am more than 13.
I am less than 15.
I have a 4 in my number.
I am ________?

Game 2

I am an odd number.
I am a near double.
I am less than 14.
6 is one part of my near double.
7 is the other part of my near double.
I am ________?

Game 3

I have two digits.
I am greater than 17.
I am less than 20.
I am a near double.
I am ________?

Problem-solving

You can perform a wide range of problem-solving activities with your child at any time, in the house, at play, shopping in the park, etc. Ask simple questions such as:

- *How many ducks can you see in the pond? (8)*
- *If 7 more ducks come along, how many ducks would be in the pond then? (15)*
- *If 3 more came along, how many ducks would there be? (18)*

You can give other problems to your child using apples, pears, bananas, spoons, cups, fridge magnets, vegetables in a vegetable patch (if you have one), coins, books, spools, magazines, pencils, markers, etc.

Variation: Ask your child to make up questions for you to solve!

3-D shapes

Over the coming days your child will be learning about 3-D shapes, i.e. shapes with three dimensions: length, width/breadth, height or depth. Your child is now expected to know the names of the following shapes: cube (ice cube), cuboid (shoe box/cereal box), cylinder (tin of beans/Pringles box) or sphere (ball/orange). S/he needs to know some of the mathematical language associated with the 3-D shapes: corner, straight edge, flat face, curved face, etc.

Cube: A cube has six flat faces of equal size and eight corners. For example: die/dice, Oxo cube, ice cubes, boxes, etc.

Cuboid: A cuboid has six flat faces with the opposite faces of equal size. It has eight corners. For example: cereal packets, shoeboxes, pencil cases, books.

Sphere: A sphere is round in shape. It has only one curved face and no corners. For example: footballs, tennis balls, basketballs, marbles, some lights/lamps, Moon/Sun and other planets.

Cylinder: A cylinder has one round face and two flat, circular faces (ends). For example: tin of beans/peas/soup, Pringles/Smarties boxes, packets of mints, fire extinguishers, etc.

3-D shapes around us

Point out to your child some shapes around the house or when out shopping that come in the shape of a cube, cuboid, cylinder or sphere. Some of the packets may be for sweets or other unhealthy products, so emphasise the value/necessity of healthy eating to your child.

Game 1: I Spy

Play the game 'I Spy' with your child to find items in the house that are in the shape of a cube, cuboid, cylinder or sphere. Say: I spy with my little eye something in the shape of a cornflakes box (cuboid). Continue the game with other items such as a shoebox, pencil case, etc.

Game 2: Roll like a sausage

Ask your child to roll like a sausage. S/he needs to know what it means to roll as they are required to recognise shapes that can/cannot roll.

Activity 1: Rolling

Take a number of different objects that are to hand and ask your child if it can/cannot roll, e.g. marker, ball, cup, book, tin of beans, shoebox, etc. Ask some open-ended questions, i.e. ones with more than a yes or no answer:

- *Why do you think the scissors won't roll?*
- *Why won't the tin of beans roll while it is standing upright?*
- *How might you make the tin of beans roll?*
- *Will the shoebox roll?*

Activity 2: Stacking

Give your child a number of different objects to hand and ask him/her if they can/cannot stack. Put particular emphasis on the tins that will only stack when upright. Try to elicit this information from your child.

Shape vocabulary

Corners: A corner is formed where two straight edges meet.
Faces and edges: There is considerable international debate about edges and faces of 3-D shapes. Many educationalists believe that faces and edges can only be flat, which would mean that a sphere has no face. For our activities, we presume that a face/edge can be flat or curved; therefore, a sphere has one curved face.

Call out some of the following questions/instructions to ensure your child understands the terms:

- *What is a face?*
- *Show me your face.*
- *Do shapes have faces?*
- *Show me a face on the cube in front of you.*
- *What is an edge?*
- *Show me an edge of your lunchbox/table/book/bed/chair, etc.*
- *Show me an edge on the cube in front of you.*
- *What is a corner?*
- *Show me a corner in this room/bed.*
- *Show me a corner on the cube in front of you.*

This can be done with any objects that you see around the house, garden or local area.

Place value to 19

Place value to 19

Your child will be dealing with place value to 19 over the next few days. This will be done by means of puzzles, games and concrete materials, such as cubes, etc.

Game 1: Four-handed teens (revision)

Work with your child to make the numbers 15–20, as done earlier in the year with the numerals/numbers 10–15. Hold up both hands to make 10 with your fingers. Have your child hold up 1–10 to make the units.

Game 2: Arms up, arms down

Ask your child to stand up and begin counting 1–20. S/he must put his/her arms up in the air when s/he says 1 and put his/her arms down when s/he says 2, etc. until s/he reaches the target number 20.

Game 3: Blast off!

Ask your child to count to 20 beginning at 1. Each time they say a decuple (10, 20, 30, 40, etc.), s/he shouts 'Blast off' and mimics blasting off like a rocket using their hands. For example: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 'Blast off', 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 'Blast off', etc.

Making a ten

Ask your child to place 10 small items from around the house onto a plate/box or into a Ziploc bag. These items can be anything that is of interest to your child, e.g. dinosaurs, toy cars, pasta shapes, fruit, cubes, buttons, shells, etc. Invite your child to say: *I have made one bundle/group of ten*. S/he can place the numeral card 10 beside the bundle.

Variation: Place some lollipop sticks/headless matches/straws/keys/crayons/markers/bottle tops, etc. (up to 19) on the table. Ask your child to use pieces of string or elastic bands to bundle the 10 chosen items together. Invite your child to say: *I have made one bundle/group of ten*. S/he can place the numeral card 10 beside each bundle.

Numbers to 19

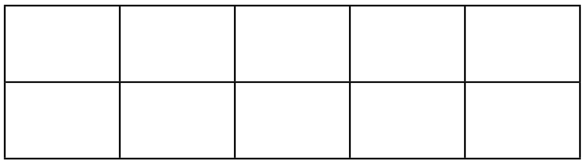
As with the variation earlier, place some lollipop sticks/headless matches/straws/keys/crayons/markers/bottle tops on the table. Ask your child to count out 14 of his/her chosen items. Then ask your child to use pieces of string or elastic bands to bundle 10 items together.

Ask questions such as:

- *How many straws are there altogether?*
- *How many straws are in the bundle?*
- *How many loose straws are there? / How many straws are left over? / How many straws are outside the bundle?*

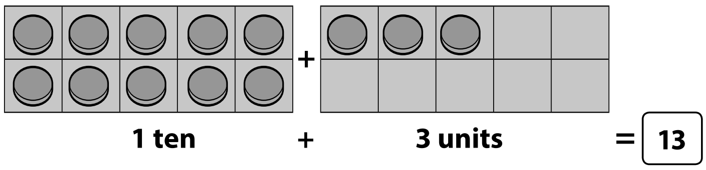
So, 14 is made up of a bundle of 10 straws and 4 loose straws or 14 = 10 + 4. Do this with a range of items using numbers from 10 to 19.

The Ten Frame



Ten Frame

Revise work done on making a ten using the Ten Frame. A Ten Frame can be easily made on a piece of paper with 10 squares of equal size. Give your child 10 similar items, e.g. cubes/counters/buttons/shells/fridge magnets/conkers, etc. Ask him/her to make a ten in different ways, e.g. 3 red counters and 7 blue counters; 4 yellow and 6 green; 2 orange and 8 purple, etc. Remember the colours are not particularly important! Now use two ten frames to help your child understand how to make tens and units.



Ask your child to fill the first Ten Frame with 10 cubes/counters, etc. and to place 3 cubes on the other frame.

- *How many cubes are in the first ten frame?*
- *How many cubes are in the second ten frame?*
- *How many cubes are there altogether?*

So, 13 is made up of a group/set of 10 cubes and 3 cubes or 13 = 10 + 3. Do this with other numbers from 10 to 19.

Money (twenty cent)/Shopping

Money

Your child will be learning about 1c, 2c, 5c, 10c and 20c over the coming days. Your child needs to know the mathematical language associated with money: dear, expensive, cheap, cheaper, which is cheaper?, how many?, count, money, brown, copper, yellow, what colour is a ___ coin?

Counting coins

Exposing your child to real coins/money is the best way to teach him/her. There is nothing better than the hands-on experience.

Game 1: Matching coins

Collect as many 1c, 2c, 5c, 10c and 20c coins as you can. Place them in a pile in the centre of the table. Give your child five boxes/cups/plastic cups/bags, etc., as done in Junior Infants with the coins 1c–5c only. Write the amounts 1c, 2c, 5c, 10c and 20c on Post-it notes. Place the Post-it notes on the boxes. Ask your child to sort the coins into the correct boxes, etc.

Shopping

Bring your child shopping with you and talk to him/her about the prices of different items. If you are paying by cash and get copper in your change, ask your child to take it from the cashier. S/he can tell you how much s/he has received.

Game 2: Shop

Ask your child to help you make a small play shop in a section of a room in the house. Collect a number of easily sourced items, e.g. items that you have bought in the shop. Use Post-it notes or pieces of paper as price tags. Place the price tags on or under the items. No item should cost more than 20c. Make up some questions about the items or get your child to make up some questions. For example:

- *How much does the packet of cereal cost?*
- *Which is dearer/more expensive: the apple or the orange?*
- *I have 16c. Have I enough money to buy the carrot?*
- *Which item is the dearest/most expensive/cheapest/least expensive, etc?*

Monopoly

If you have the children's version of the board game Monopoly, you can play it with your child.

Game 3: Trading up coins to 20c

This game can be played with 2/3/4 players. The object of the game is to trade 1c and 2c coins up to 5c coins. Then these can be traded up for 10c coins, which can then be traded for 20c coins.

You will need a large amount of 1c, 2c, 5c, 10c and 20c coins. Each player throws a die. (It may be better and quicker if each player throws two dice!)
If s/he throws a 5, s/he is given five 1c coins. The object of the game is to trade the five 1c coins up to 2c and 2c and 1c first before finally converting (trading up) to a 5c coin.

If the player gets a 6 on the next throw, s/he now has 5c + 1c + 1c + 1c + 1c + 1c + 1c. These can now be traded for 5c + 2c + 2c + 2c before trading 2c + 2c + 1c for 5c. S/he now has 5c + 5c + 1c. These can be traded up for 10c + 1c.

The game continues in this way. The winner of the game is the first person to trade all his/her coins so as to have whatever number is decided by the players in advance.

Poem: My Coins

Read the poem 'My Coins' with your child. This is revision of work done in Senior Infants.

My Coins

I know a little poem.
It isn't very funny.
It's about my cent coins,
And how to count my money.

A cent means there's just one.
Two cent means there's two.
And we all know that's one and one.
And to have two cent is really fun.

Five cent means five.
That means two and two and one.
When I have five cent,
Off to the shop, I run.

Children can do actions to this poem by holding up the appropriate number of fingers for each coin, when mentioned.

CJFallon

Tens and units to 19

Place value to 19

Your child will be dealing with place value to 19 over the next few days. This will be done by means of puzzles, games and concrete materials, e.g. cubes, etc.

Game 1: Blast off!

Ask your child to count to 20 beginning at 1. Each time they say a decuple (10, 20, 30, 40, etc.), s/he shouts 'Blast off!' and mimics blasting off like a rocket using their hands. For example: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 'Blast off', 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 'Blast off', etc.

Game 2: Stand up, sit down

Ask your child to count in tens from 10 to 100. As s/he says 10/20, etc., s/he can alternate between standing up and sitting down. For example, when saying 10 (stand up), 20 (sit down), 30 (stand up), 40 (sit down), etc.

Variation: Ask your child to begin at different starting numbers for this activity. S/he can also count backwards from different starting numbers.

Making a ten using money

Give your child 16 real 1c coins. Ask him/her to count out the 1c coins until s/he has a set of 10 coins. Encourage your child to now say: I must swap my ten 1c coins for one 10c coin. You can act as the shopkeeper and make the swap or exchange. Then reverse the roles with your child as the shopkeeper who gives out the 10c coin for the ten 1c coins.

Now ask your child:

- *How much money is there altogether?*
- *How much money is there in this coin? (10c)*
- *How many loose cent coins are there?*

So, 16 is made up of a 10c coin and 6 1c coins or 16 = 10 + 6.
Do this with other amounts of 1c coins from 10 to 19 ensuring that your child swaps ten 1c coins for a 10c coin each time.

Notation board

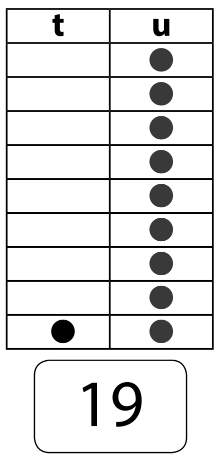
Make a simple notation board as on page 75 of the pupil's book. Be sure to have only nine divisions in it because when you have 10 counters in the units place you must swap them for a ten – just as you would swap ten 1c coins for a 10c coin.

You can take on the role of shopkeeper. You should have at least 10 green counters to act as units and a red counter to act as a ten. (You can use coins/cubes or anything else to hand that can be made into sets of ten.)

Your child rolls a die and collects the corresponding number of counters/units from the shopkeeper. For example: If your child rolls a 5 on the die, you will give him/her 5 units. S/he then places the 5 units in the units house on the notation board. If s/he then rolls a 6, you must give him/her 6 counters. S/he places the counters on the notation board. It should become obvious that there is not enough room for all the counters on the notation board. S/he must now say:

- *I must go to the shopkeeper and swap/exchange my 11 units for 1 ten and 1 unit.*
- *I now have 1 ten and 1 unit altogether. This number is 11.*

Play continues until your child makes 19.



CJFallon

Telling the time!

Your child will be learning about time – the clock in one-hour and half-hour intervals as well as the days of the week. Your child will need to know the language of time: hands, clock face, long/short hand, o'clock, numbers/numerals 1–12, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday.

Making a clock

Make a clock with your child using cardboard. First cut out a circular piece of card. Then cut two small pieces to act as hands. Stick the hands to the face using a brass fastener or clip. The clock hands can then be manipulated by your child. Ask your child to write the numerals/numbers 1–12 on the face in the correct order. You may need to help him/her do this. If you have an old clock to hand where the hands can be manipulated by your child, it is even better!

Show your child a time, e.g. 7 o'clock and ask: *What time is it? Why is it 7 o'clock?* We hope to get an answer something like: *Because when the long hand points to 12 and the short hand points to 7, it is 7 o'clock.* Do the same with a number of other hour times.

Now show your child a time where the half-hour is introduced, e.g. half past five. Ask: *What time is it? Why is it half past 5 o'clock?* We hope to get an answer something like: *Because when the long hand points to 6 and the short hand points halfway between 5 and 6, it is half past five.* Do the same with a number of other half-hour times.

Note: Emphasise to your child that to show half past five the long hand points to 6 and the short hand must be pointing halfway between 5 and 6.

The days of the week

Your child will need to know the language of the days of the week: Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday, yesterday, tomorrow, weekend, first to seventh days of the week. Write out the days of the week on sheets of paper or on flashcards. Shuffle the sheets of paper/flashcards and ask your child to place them in order starting with Monday.

Note: The categorising of the first day of the week differs from country to country. Some have Sunday as the first day with Saturday as the last day. Other countries have Monday as the first day with Sunday as the last. In Ireland, we call Monday through to Friday weekdays with Saturday and Sunday classed as the weekend. You may want to explain this to your child that for the purpose of the following activities/poems, we take Monday as the first day of the week.

Get your child to pierce a small hole at the front and end of each day's name on the sheets of paper/flashcards. Get him/her to join the different days in order using a piece of string or paper (like a Christmas decoration). These can then be displayed in the kitchen or bedroom.

Songs about time

Read, say or sing the following songs by Cian Murtagh with your child.

Song 1: The Days of the Week

Monday, Tuesday, Wednesday too,
Thursday, Friday all for you.
Saturday, Sunday, that's them all.
All those days we will recall.
(Sing again and again.)

Song 2: Let's All Sing

(Sung to the tune of 'Frère Jacques')

Here we have
The days of the week
Let's all sing.
Let's all sing.
Monday, Tuesday, Wednesday,
Thursday, Friday, Saturday,
Sunday.
My favourite day!

CJFallon

Place value to 50

Your child will be dealing with place value to 50 over the next few days.

Game 1: Clap and stamp

To begin, have your child count forwards beginning at 1, clapping his/her hands as s/he says each individual number. Blow a whistle or beat on a drum or biscuit tin lid. At this sound your child must count backwards from the number s/he said last, stamping his/her feet as s/he counts each individual number.

Game 2: Clap, tap

Ask your child to count in tens from 10 to 100. As s/he says each decuple, have him/her alternate from clapping a number to tapping a number. For example: S/he will say 10 (clap), 20 (tap), 30 (clap), 40 (tap), etc.

Game 3: Blast off!

Ask your child to count to 50 beginning at 1. Each time s/he says a decuple (10, 20, 30, 40, etc.), s/he shouts 'Blast off!' and mimics blasting off like a rocket using their hands.

Game 4: Guess my number!

Write a number between 1 and 50, e.g. 37, on an A4 sheet of paper or any paper that is to hand. Hide the number behind a box and slowly push the number up over the box. Stop when part of the number can be seen by your child. Have your child guess what the number might be. If your child fails to recognise the number, show a little more of it until such time as s/he calls out the correct number.

Game 5: Number detectives

Have your child act as a detective and examine a number between 1 and 50. Encourage him/her to come up with as many facts as possible about the number, e.g. number 35:

- *It is made up of a three and a five / 3 tens and 5 units.*
- *It comes just after 34.*
- *It comes just before 36.*
- *It is an odd number.*
- *It is 3 greater than 32.*
- *It is 3 less than 38, etc.*

Making tens using money

Place 50 real 1c coins, if they are to hand, on the kitchen table/floor/chair. Keep five 10c coins near you so you can act as banker. Ask your child to count out the 1c coins until s/he has a set of 10 coins. Encourage your child to now say: I must swap my ten 1c coins for one 10c coin. As the banker, you can make the swap or exchange. Then reverse the roles with your child.

Variation: Ask your child to give you different amounts of money from 11c to 50c using the least amount of the coins on the table, e.g. 43. S/he must give you four 10c coins and three 1c coins. This should help his/her understanding of tens and units.

Now ask your child:

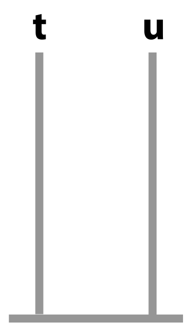
- *How much money is there altogether?*
- *How much money is there in the four 10c coins? (40c)*
- *How many loose cent coins are there? (3)*

So, 43 is made up of four 10c coins and three 1c coins or 43 = 40 + 3. Do this with other amounts of 1c coins from 11c to 50c, ensuring that your child swaps ten 1c coins for a 10c coin each time.

Notation board

Make a simple notation board as on page 75 of the pupil's book. Be sure to have only nine divisions in it because when you have 10 counters in the units place you must swap them for a ten – just as you would swap ten 1c coins for a 10c coin. Ask your child to show different numbers from 1 to 50 on the notation board using coins: 1c coins go in the units column and 10c coins go in the tens column. Then change to using counters as done on **Sheet 14** earlier.

The activities outlined above for the notation board can be repeated on the abacus. First of all, ask your child to make numbers 1–9 on the abacus, next ask him/her to make 10 on the abacus, and finally to make numbers up to 50.



t	u

Fractions (half)

Fractions (half – 1/2)

Your child will be dealing with fractions over the next few days. This will be done by means of games and using concrete materials.

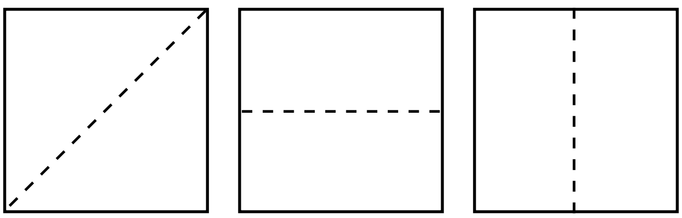
Game: Cut the apple

Explain to your child that you are going to give him/her a piece of an apple/orange/circular piece of paper/cupcake/pizza, etc. Cut the apple/cupcake, etc. so that one piece is much bigger than the other. Ask your child to choose which piece s/he would like. More than likely, s/he will want the larger piece and would feel it unfair to get the smaller piece. (This exercise may have been done already in class.)

Tell your child that you have a solution to the problem. Take out another apple/cupcake. Explain that s/he will cut the apple/cupcake, etc. but that you will choose which piece s/he will get. This will encourage the 'cutter' (your child) to make the pieces as equal as possible. You can do this activity using other items that your child likes. Try to use healthy foods where possible! Encourage your child to use the language 'half' at this stage – s/he may already have this language.

Making half

Give your child a regular paper napkin. Ask him/her to fold it in two equal pieces (half/½). Ask him/her to explore more than one way of making half, e.g. corner to corner or down the centre, etc.



Ask your child to fill a glass with water/sand/peas or pasta shells so that it is (roughly) half-full. Ask him/her to explain why s/he thinks that it is half-full. Then ask your child to build objects out of play dough – regular shapes would be best at this time. Encourage him/her to cut each shape in half.

Sharing equally 1

You will need concrete items for sharing, e.g. lollipop sticks/marbles/cubes/counters, fruit, etc. Explain that you have 10 marbles in your hand and you want to give half to your child and to keep the other half yourself. Share the marbles between you 'one for you and one for me' until all the marbles are gone. Ask your child questions such as:

- *How many did you get?*
- *How many did I get?*
- *Did we get the same amount?*
- *Did I share the marbles equally?*
- *How many marbles are there altogether?*
- *So, what is half of 10?*

Continue with many other examples using different objects up to a total of 20.

Sharing equally 2

Place up to 20 cubes/coins/buttons, etc. on the table. Put two plates/saucers/cups, etc. in the centre of the table. Tell your children that s/he can find half of a number by sharing the cubes equally, e.g. Find half of 14. Have your child count out the 14 cubes. Then have him/her share the 14 cubes equally between the two plates/saucers/cups, etc. Ask the following type of questions:

- *How many cubes are on the left/first plate?*
- *How many cubes are on the right/second plate?*
- *Did you share the cubes equally?*
- *So, what is half of 14? (yes, 7 is half of 14)*

Continue with many other examples using different objects up to a total of 20.

Data and subtraction

Your child will be learning how to read data from a chart over the coming days. S/he will also be dealing with subtraction up to 20. This will be done by means of games and activities using concrete materials. Your child will need to know the language of data and subtraction: column, row, chart, subtract, take away, smaller, bigger, more than, less than, not as many, minus.

Representing and interpreting data

Data can be organised in many ways in everyday life, from pictograms to bar charts to bar graphs, etc. In Senior Infants, your child was expected to represent and interpret data (information/objects, etc.) in two rows or columns. In First Class, s/he is asked to represent and interpret data in four rows or columns. It is best to introduce your child to data by using a range of objects that are familiar to him/her.

Making rows

Give your child up to 10 buttons/pasta shells/clothes pegs/fridge magnets, etc. It is best to start with only two rows or columns and build up to four rows/columns. Ask him/her to make a row of 7 buttons. Then ask him/her to place a row of 5 pasta shells directly underneath the buttons.

These rows should be in one-to-one correspondence (directly under each other). Your child should be able to see the pasta shells in the bottom row that correspond to the buttons in the top row. S/he should also be able to see that there are two extra buttons in the top row. You can ask questions like:

- *How many buttons are in the top row?*
- *How many pasta shells are in the bottom row?*
- *How many more items are in the top row than in the bottom row?*
- *How many fewer items are in the bottom row than in the top row?*

You can now ask your child to add a row or column of clothes pegs and ask similar type questions. Then add a row/column of fridge magnets and ask a variety of questions.

Note: Any small items you have to hand can be used to make the rows or columns.

Subtraction

In this section of the book your child is asked to look carefully at two sets of items and decide which set has more/less. This is linked to work just done on data.

Your child is also asked to complete a subtraction number sentence (sum) using the minus (–) sign, e.g. 19 – 16 = 3.

Ask your child to place a row of 12 clothes pegs in a line across the table. Have him/her now place a row of 9 buttons in one-to-one correspondence underneath the top row of clothes pegs.

It should be obvious from placing the items that there are three more items in the top row. You can ask questions such as:

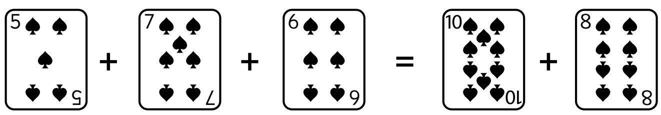
- *How many clothes pegs are in the top row?*
- *How many buttons are in the bottom row?*
- *Which row has more? Which row has less?*
- *How many more clothes pegs are there in the top row?*
- *How many fewer buttons are there in the bottom row?*

Your child should now be able to use a number story to describe what has taken place, e.g.
12 is more than 9 by 3 or 9 is smaller than 12 by 3.
This number story information can now be placed in a number sentence: 12 – 9 = 3.

This activity can also be done using rows of cups and saucers or socks and shoes, etc.

The hidden card

You can play this game with your child. Remove all the court (picture) cards first from the pack of cards.



5 + 7 + 6 = 10 + 8

Place the three cards on the table showing the total as 18. But have one card of your choice face down. The idea is that your child must work out what the value of the hidden card is. This can be done with a range of totals up to 20. It is best to start with only two cards, with one of them hidden.

Place value to 99

Your child will be dealing with place value to 99 over the next few days.

Game 1: Shoulders, knees and toes

Ask your child to count in tens from 10 to 100. As s/he says each decuple, s/he should alternate from touching his/her shoulders to touching his/her knees. For example: 10 (touch shoulders), 20 (touch knees), 30 (touch shoulders), 40 (touch knees), etc.

Variation: Your child can begin at different starting decuple numbers for this activity. Also, s/he can count backwards from different starting decuple numbers too.

Game 2: Guess my number!

Write a number between 50 and 99, e.g. 87, on an A4 sheet of paper or any paper to hand. Hide the number behind a box/chair/sofa and slowly push the number up over the box. Stop when part of the number can be seen by your child. Have your child guess what the number might be. If your child fails to recognise the number, show a little more of it until such time as s/he calls out the correct number.

Game 3: Who am I?

Give your child some clues about the secret number, e.g. 73. Have your child work out what the number is. For example:

Example 1:

I am an odd number.
I have two digits.
I am more than 70.
I am less than 75.
My second digit is 3.
Who am I?
I am 73.

Example 2:

I am an even number.
I have two digits.
My first digit is 10 more than 70.
My second digit is 3 less than 9.
Who am I?
I am 86.

Game 4: Mystery number

Write down a mystery number between 50 and 99 on a sheet of paper. Your child has to ask you some questions in order to find out what the mystery number is, but you can only reply using yes or no answers. Have your child ask at least three questions before s/he can guess what the mystery number is. For example, s/he can ask:

- *Is it less than 80?*
- *Is it an even number?*
- *Does it have 7 tens?*

Game 5: Order us

Make numeral cards 50–99 on pieces of paper or Post-it notes. Place them in a box or bag. Ask your child to pick out three of the numeral cards. Get him/her to order the cards from smallest to biggest number.

Variation: S/he must order the numeral cards from biggest to smallest.

This game can be continued by asking your child to pick out up to 10 numbers at a time and to order them from smallest to biggest.

Notation board

Make a simple notation board, as on pages 75 and 116 of the pupil's book.

Ask your child to show different numbers from 50 to 99 on the notation board using coins: 1c coins go in the units column and 10c coins go in the tens column. For example: 76c. Here your child should place six 1c coins in the units column and seven 10c coins in the tens column. Do this with several other numbers.

The activities outlined above for the notation board can be repeated on the abacus. First of all, ask your child to make numbers 1–19 on the abacus, next ask him/her to make numbers up to 50 on the abacus. Finally ask him/her to make numbers up to 99.

You can use simple counters instead of coins if you wish.

Weight

Weight

Over the next few days or weeks your child will be learning about weight. Your child needs to know the language of weight: estimate the weight, weigh, heavy, heavier, heaviest, light, lighter, lightest, about the same weight, nearly the same weight.

Heavy and light things at home

Allow your child have fun trying to estimate (an educated guess) the weight of a number of common objects/items that can be found in the home or close environment. Do have some heavy objects, such as paperweights/stones/bricks/magnets/marbles, etc., to highlight that some small objects can be much heavier than big objects. Similarly, it is important to have some big objects, such as feathers/balloons/paper/cardboard/cups, etc., to highlight that some large objects are much lighter than smaller objects. We shouldn't always judge the weight of something by its appearance alone.

Not always as it looks!

You will need three boxes for this activity: one large, one medium-sized and one small. The boxes should be filled as follows:
Large box: cotton wool (or feathers).
Medium box: scarves/gloves/hats.
Small box: stones/sand.

(If you don't have these materials, use whatever you have to hand.) Explain to your child that each box is full, but do not tell him/her the contents. Ask him/her to predict which box is heaviest, lightest and of medium weight. Ask him/her to give reasons for his/her predictions.

Extension work: Invite your child to lift or hold the boxes. Ask if s/he would like to change his/her predictions. Use a balance or scales to compare the weights of the boxes. Then reveal the contents of the boxes and discuss what has happened.

Weighing two objects

Place a number of normal objects that are in the home on the table. Have your child compare their weights, e.g. pencil, crayon, lunchbox, schoolbag, paper clip, lollipop stick, maths book, library book, stapler, chair, bowl, mug, sock, jumper, bottle of water, pot, apple, etc. Focus your children's attention on two objects at a time, e.g. the lollipop stick and mug. Ask your child: *Which is heavier/lighter?*

Pick up another object, e.g. a stapler. Ask your child to identify other objects from the selection that s/he thinks might be heavier/lighter than the stapler.

Have a balance or a household scales available for your child to check his/her estimates. Ask your child to check his/her answers by weighing both objects by hand (feel) before checking with a scales or balance. Now get your child to focus on three objects at a time.

The kilogramme

Get some 1kg weights (bag of sugar/flour/rice/pasta shells, etc.), some apples, copies, and maths book. Place your 1kg weight on the balance/scales and ask:

- *Which is lighter: the 1kg or an apple?*
- *How many apples do you think weigh the same as the 1kg weight?*

Place an apple into the opposite tray of the balance/scales. Keep adding apples until the two trays are level or balanced. Ask your child to keep count. Repeat the activity, balancing the copies and maths book, etc. Give a selection of objects to your child, e.g. sock, plastic spoon, 1kg of sugar, 1kg of frozen peas, paper clip, clothes peg, a bag of potatoes, 1kg of bananas, bar of chocolate, chair, etc. Ask your child to categorise the objects into:

1. Less than a kilogramme
2. About a kilogramme
3. More than a kilogramme

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Counting in twos, fives and tens

Over the next few days/weeks your child will be learning about counting in twos, fives and tens as well as doing work using the hundred square.

Game: Yo-yo counting

Swing a yo-yo slowly in front of your child. If you don't have a yo-yo, tie a beanbag or ball of paper to a piece of string and swing it gently like a pendulum. Ask your child to count forwards in twos in time with the yo-yo swings, beginning at 2. When your child is confident with this activity, invite him/her to count forwards in twos beginning at different numbers (e.g. 1, 8, 22) again in time with the yo-yo swings. At various points, invite your child to count backwards in twos from different points, e.g. 6, 11, 24, etc. Do a similar activity when counting in fives and tens.

Listen and count

Drop some 2c coins into a tin. Ask your child to count silently in twos in his/her head. For example, drop six 2c coins into a tin. Have your child listen and count in twos as each coin is dropped into the tin. Then invite your child to say what number s/he is at. In this example, your child should be at the number 12 in his/her head. Similar activities counting in fives and tens can also be carried out.

Taking turns

Ask your child to take turns with you when counting in twos from 0 to 50. You can start by saying 0 (zero). Your child says 2, you say 4, and so on up to 20/30/40/50. Tell your child that you will repeat the activity but that this time you will start at 20 and count back to zero. Have your child start this time at 20. Make the game more difficult by starting at 30/40 or 50.

Body parts

Ask your child to observe the other members of the household and to count the eyes/ears/hands/feet in twos.

Fingers and toes

Ask your child to look at both yours and his/her hands and feet. Ask him/her to count the fingers (thumbs included!) and toes in fives. Other members of the family can also be included.

Money! Money!

Collect a number of 2c, 5c and 10c coins – children learn more quickly when using real coins! Start with 2c coins. Ask your child to place the coins on the table and to count them. Do the same for 5c and 10c coins.

The hundred square

Make a hundred square of your own or ask your child to make one, as on page 128 of the pupil's book. Ask your child to write all the numbers in the correct boxes. Then ask him/her to investigate all the numbers on the hundred square and write down a list of the numbers whose digits add up to nine. For example: 9, 81, 90, 72, 63, 54, 45, 36, 27, 18.

Variation 1: Find all the numbers whose digits add to 10, 11, etc.

Variation 2: Find all the numbers with the digit 1/2/3, etc. in them.

Variation 3: Find palindromes (numbers that read the same forwards and backwards). For example: 88, 66, 44, etc.

Hide and seek!

Place the hundred square on the table. Cover any number you wish on the hundred square with a counter/cube as your child looks away. Have your child work out which number is covered.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

hundred square

Addition

Over the next few days your child will be learning about addition of one-digit to a two-digit number as well as some helpful addition strategies.

Bundles of ten: How many?

Display bundles of ten straws/lollipop sticks one-by-one for your child to count, e.g. 4/6/7 bundles of ten. Ask questions such as:

- *If I add one more bundle of ten, how many straws will I have?*
- *If I add two more bundles of ten, how many straws will I have?*
- *If I take away a bundle of ten, how many straws will I have left?*

Extension work: Display four bundles of ten and three units. Ask:

- *How many straws have I got altogether now? (43)*
- *If I add four more straws, how many straws will I have altogether? (47)*

Invite your child to explain what strategy s/he used to get the answer. For example: *I started at 43 and counted on 4. There were 43 straws, which is 4 tens and 3 units. I added the 3 units to the 4 new straws and got 7. Now there are 40 + 7 straws, etc.*

Do this with other numbers up to 99.

Target board

Make a grid similar to the one below on a sheet of paper.

10	70	40	50
17	26	80	90
83	60	30	41
98	65	38	47

Ask some of the following:

- *Order the numbers in the 1st row from smallest to biggest.*
- *Order the numbers in the 3rd column from smallest to biggest.*
- *What is double 10/30/40?*
- *What is 10 more than 30/50/70?*
- *What is 20 more than 40/60/26?*
- *What is 30 more than 10/30/40/17/41?*

Adding two numbers

Ask your child to show 25 using straws, i.e. 2 bundles of 10 straws and 5 loose straws. Now get him/her to add in 3 more straws and ask:

- *How many have you now?*
- *How did you solve the problem? I had 2 bundles of ten and 5 loose straws. I put the 5 straws and the 3 straws together to give me 8 straws, now I have 28 straws altogether.*

Do this with a number of similar questions.

Rounding

Ask your child to connect 10 cubes to make a ten and also to connect two lines of 10 cubes to make twenty.

Ask him/her to think about the number 13. Ask: *By how many cubes is 13 more than 10?* Have your child line up the 10 and line up the 13 underneath the line of 10, if s/he needs to check.

By how many cubes is 13 less than 20? Have your child line up the 13 cubes underneath the row of 20 cubes, if they need to check. It should be obvious that 13 is closer to 10 so we round 13 down to 10. Now ask him/her to discuss the number 18 and work with him/her as you did with the number 13. It should be obvious that 18 is closer to 20 so we round 18 up to 20.

Now do the same with the number 15. It should be obvious that 15 is exactly halfway between 15 and 20. You can explain to your child that we round 15 up to 20. We always round any number with a 5 up to the next 10, e.g. 25 rounds up to 30 / 45 rounds up to 50.

Capacity – measuring

Over the coming days your child will be learning about capacity, i.e. the measure of the amount of water, etc. different containers can hold. S/he needs to know the language of capacity: holds more/less, holds most/least, fewer, container, full, empty, nearly full/empty, not as full as, estimate, measure, pour, match, fill, litre, more/less than a litre, about a litre.

Which container holds more?

Get a selection of containers that are commonly used in the home, e.g. spoon, egg cup, glass, cup, bowl, mug, milk/juice carton, bottle, yoghurt carton, ice-cream tub, soup tub, saucepan, pot, jug, vase, kettle, bucket, etc. Focus your child's attention on any two objects at a time, e.g. the mug and bucket. Ask: Which holds more/less? Repeat this activity, changing the focus to different containers each time. Pick up one object, e.g. the mug. Ask your child to identify other containers that they think hold more/less than the mug. Repeat this activity, changing the container each time.

If there is any disagreement or debate with your child as to which container holds more/less, put it to the test! Fill the two containers in question with water/sand/pasta shells and empty each into a larger container. See which takes up more space in the new container.

Full and empty

You will need four similar glasses or containers of your choice. It is preferable that the containers are transparent (can see through them). Using water/sand/pasta shells/peas, etc. fill each container so that one is full, one is empty, one is nearly full and one nearly empty. Focus your child's attention on one container at a time. Ask him/her to describe that particular glass. For example:

- *The glass has water in it.*
- *There is water right up to the top.*
- *It has a little water in it, etc.*

Encourage your child to use the vocabulary full/empty/nearly full/nearly empty.

Ask your child to point to the glass that is full/empty/nearly full/nearly empty. Now ask him/her to put the glasses in order starting with the empty one up to the full one.

Get measuring!

You will need a spoon, egg cup, yoghurt carton, cup, teapot, jug, saucepan, glass, bowl, milk carton and a bottle of water. Begin by holding up a spoon and an egg cup. Ask your child:

- *Which do you think holds more/less?*
- *How many spoonfuls of water do you think will fill the egg cup?*
- *What is your estimate?*

Invite your child to carry out the experiment by pouring water from the spoon into the egg cup. Ask him/her to keep count as s/he pours in the spoonfuls. Now ask: *Was your estimate close or far from the answer?*

Litres come in different shapes

Gather a selection of litre containers to show your child that litre units come in a wide variety of shapes, e.g. milk cartons, milk bottles, ice-cream tubs, bottles of soft drinks, water bottles, juice cartons, bottles of cooking oil, etc. Make a list of items that are bought in litres.

About a litre

Get a selection of liquid containers (described above). Ask your child to sort the containers into three groups:

1. Less than a litre
2. About a litre
3. More than a litre

Which bottle holds more? Similar shapes

Give your child some bottles of similar shape and ask him/her to arrange them in order of which holds the most/least. Ask him/her to tell you why they think the bottles/containers were arranged in that order. Ask some open-ended questions, i.e. ones with more than a yes or no answer:

- *Why did you put that bottle first?*
- *Why do you think it holds more than that bottle?*
- *Why do you think that bottle holds less than this one here?*

After the discussion, have your child test whether his/her estimations of the capacity of the different containers was correct or incorrect by filling each one with water.

Addition

Your child will be learning strategies about the addition of a two-digit number to a two-digit number and regrouping over the next few days.

Add the numbers on the cards

Using a regular pack of playing cards, deal 10 cards to yourself and 10 to your child. Each of you keep your own cards in a pile face down on the table. Have your child turn over the top two cards and add the totals together. For example: If s/he turns over a 7 and a 9, s/he adds them together to get 16. You do the same. You both compare the totals, and whichever player is showing the biggest total wins a cube. Play continues like this until all the cards are turned over. Whoever has the most cubes at the end of the game is the winner.

Variation: You can turn over three cards at a time and add up the three numbers to get a total, and continue in the same way.

Place value bingo

Ask your child to make a bingo card on a piece of paper. It can be done using a 3 x 3 or 4 x 4 grid. Now ask him/her to write 9 or 16 numbers from 50 to 99 in the squares. Call out various numbers from 50 to 99 at random. If your child has a number, s/he places a counter/coin/cube over it. Keep calling out numbers until your child has a counter on each of the numbers. S/he then shouts 'Bingo' and is the winner. This game is best played with 2/3 players.

Bingo Card

Show me!

Give your child up to 99 lollipop sticks, e.g. 64. First ask him/her to make 64 using the lollipop sticks in the standard way as 6 groups of 10 and 4 units. Then ask him/her to come up with as many other ways as possible of showing 64. For example: 5 tens and 14 units or 4 tens and 24 units, etc. Do this with as many numbers as you can.

Let's regroup! Small numbers

This activity can be done using coins/cubes/counters or lollipop sticks. Place 8 cubes on the table. Call out the following instructions/questions:

- *How many cubes are there?*
- *I am now going to add 4 more cubes.*
- *How many cubes have I now? (yes, 12)*
- *What can we swap 12 units for? (yes, I can swap them for 1 ten and 2 units)*
- *So, 8 + 4 = 12.*

Make sure to physically make the group of ten into a proper group by interlinking them. If you are using lollipop sticks or straws, use an elastic band. If you use coins, make sure that your child swaps ten 1c coins for a 10c coin. Do the same with a number of other sums with totals to 19 only.

Let's regroup! Big numbers

As with the previous activity, place 27 cubes on the table. Call out the following instructions/questions:

- *How many cubes are there? (yes, 27 cubes – 2 groups of ten and 7 loose cubes)*
- *I am now going to add 8 more cubes.*
- *How many cubes have I now? (yes, I have 2 groups of ten and 15 loose cubes)*
- *What can we swap 15 units for? (yes, I can swap them for 1 ten and 5 units)*

Make sure to physically make the group of ten into a proper group by interlinking them. Ask: *How many tens have I now? I have the original 2 tens plus the new ten as well as the 5 loose cubes. So, 27 + 8 = 35.* Discuss the value of the digits:

- *What is the value of the 3? (yes, 30)*
- *What is the value of the 5? (yes, 5 units)*

Do the same with a number of other sums with totals to 99 only. You can also do this with questions such as: 38 + 26 = ?

Money – Fifty cent

Your child will be learning about 1c, 2c, 5c, 10c, 20c and 50c coins over the coming days.

Game 1: The shop

Make a number of price tags using pieces of paper or Post-it notes. Ask your child to put different prices on the tags, e.g. 11c, 14c, 17c, 24c, 28c, up to a maximum of 35c at this stage. We only want your child to add shopping to a maximum of 50c. Ask your child to place the price tags on different items around the kitchen, e.g. bread, beans, peas, apples, oranges, etc.
Give your child some real/play money: 1c, 2c, 5c, 10c and 20c coins. You play the role of shopkeeper while your child plays the role of shopper. Make sure s/he pays for his/her chosen items. Give out change with each transaction. Roles may also be reversed. Give the shopkeeper a sheet of paper for making calculations. It is best to start with the cheaper items, two at a time and build up to three items before worrying about giving change. Ask:

- *Which is dearer/more expensive: the beans or the pen?*
- *What is the most expensive item in the shop?*
- *What is the cheapest/least expensive item in the shop?*
- *If I buy the peas and the bread, how much will it cost?*
- *If I buy the yoghurt, how much change will I get from 30c/40c/50c?*
- *How much for the melon and the lemon together? What change will I get from 50c?*

Money swap

You can play the role of banker in this activity. This game is best played if two or more children or adults are involved! Have a large selection of real or play coins in a bag or box. Make sure your child cannot see the coins. To begin you can give five coins (chosen randomly) to your child. The object of the game is for your child to exchange the coins that s/he has picked so that s/he has the least number of coins possible left. At each turn, s/he may exchange a number of coins for a single coin of the same value by saying, for example: Banker, I want to exchange these two 5c coins for one 10c coin. If your child cannot make an exchange, s/he must pick another coin (at random) from the banker's stash (your stash).

After a specified number of rounds of the game (5/10/15/20), the player with the least number of coins is the winner. This game helps your child to exchange low denominations of money for higher denominations. It also helps him/her realise that a 20c coin, which is quite small, is of equal value to 20 single 1c coins or four 5c coins, etc. It will also be useful in Game 2.

Game 2: Trading up my coins to 50c

This game can be played with 2/3/4 players. The object of the game is to trade 1c, 2c, 5c, 10c and 20c coins up to 50c coins. You will need about twenty-five 1c coins, about twenty 2c coins, fifteen 5c coins, about fifteen 10c coins, ten 20c coins and six 50c coins. Each player throws a die. (It may be better and quicker if each player throws two dice!) If s/he throws a 9, s/he is given nine 1c coins. The object of the game is to trade the nine 1c coins up to 5c and 2c and 2c. If the player gets an 8 on the next throw, s/he now has 5c + 2c + 2c + the 8 new single 1c coins which can be traded for 5c + 2c + 1c.

S/he now has 5c + 5c + 2c + 2c + 2c + 1c before trading the 2c + 2c + 1c for 5c. S/he now has 5c + 5c + 5c + 2c, which can be traded for 10c + 5c + 2c. The game continues in this way. The winner of the game is the first person to trade all his/her coins so as to have two 50c coins or whatever number is decided by the players in advance.

If you prefer, your child can trade up more quickly without having to go through each stage.

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Subtraction

Your child will be learning about subtraction of a one-digit and two-digit number from a two-digit number over the coming days.

Game 1: Subtracting playing cards

In this activity, you, your child and other family members can play. Remove all picture (court) cards from a regular pack of playing cards. Give each player 10 cards. Your child (or each player) keeps his/her cards in a pile face down on the table. Have him/her turn over the top two cards and subtract the small number from the big number. For example: If s/he turns over a 6 and a 9, s/he takes 6 from 9 to get 3. If s/he gets his/her answer correct, s/he wins a cube. Play continues like this until all the cards are turned over. Whoever has the most cubes at the end of the game is the winner. All players can write their number sentences in a copy or on a sheet of paper, e.g. 9 – 6 = 3.

Game 2: Subtracting on the hundred square

Make a hundred square or use the one that was made earlier in the year. Call out various decuples (10, 20, 30 … 90), e.g. 70. Ask your child to put a counter on 70 on his/her hundred square. Now ask him/her to put a counter on the number that is 10 less than 70; 20/10 less than 90; the decuple between 60 and 80; the decuple 20 less than 60; the decuple 20 less than 40, etc.

Extension work: Ask your child to put counters on any number from 1 to 99 on the hundred square, e.g. 25, 52, 95, etc. Ask him/her to put counters on 10 less than a particular number, etc.

Now say to your child: Let's subtract 3 from 48 on the hundred square. Allow him/her to try this out and discuss his/her strategies at arriving at a solution. Some children may just count back 3 from 48, etc.

Rows of objects

Ask your child to place a row of 17 buttons or anything else to hand in a row across the table. Have him/her then place a row of 14 marbles in one-to-one correspondence underneath the row of buttons.

You can ask questions such as:
- *How many buttons are there?*
- *How many marbles are there?*
- *How many more buttons are there than marbles?*
- *How many fewer marbles are there than buttons?*

Let's subtract 1

Display 18 straws, i.e. 1 group of 10 and 8 loose ones. Call out the following instructions/questions:
- *How many straws are there? (yes, 18)*
- *I am now going to take away/subtract 4 straws.*
- *How many straws have I now? (yes, 14)*

It is of vital importance to *physically take away* the 4 straws from the 18 straws. Discuss the value of the digits.
- *What is the value of the 1? (10)*
- *What is the value of the 4? (4)*

Extension work: Invite your child to solve various other problems involving subtraction of a one-digit number from a two-digit number without having to break up a ten. (Simply take away the units from the units only.)

Let's subtract 2

Display 37 lollipop sticks/cubes or straws with 3 groups of 10 and 7 loose ones. Call out the following instructions/questions:
- *How many lollipop sticks are there? (yes, 37)*
- *I am now going to take away/subtract 15 lollipop sticks.*
- *Let's subtract the units first. 7 take away 5 = 2. (physically remove them)*
- *Now let's subtract the 1 ten. 3 tens – 1 ten = 2 tens. (physically remove them)*
- *How many cubes are left now? Let's count them. (yes, 22)*

Extension work: Invite your child to solve various other problems involving subtraction of a two-digit number from a two-digit number without having to break up a ten. Simply take away the units from the units and the tens from the tens, e.g.
48 – 23 = 25.

Time: The clock

Over the coming days your child will be learning about time: the clock in one-hour and half-hour intervals, as well as the months of the year and the four seasons.

Note: There is a difference between Ireland and other countries in allocating months to the different seasons. Historically in Ireland, Halloween is regarded as being the celebration of the gathering in of the harvest and the end of growth. The end of October was also seen as the end of autumn and the beginning of winter. This meant that, in Ireland, winter began in November with the knock-on effect of spring beginning on St Brigid's Day, 1 February. In the USA, winter begins in December, putting their spring back to the beginning of March. Many countries have followed the American way over the years. Most Irish people still consider 1 February as the beginning of spring. For the following activities, we take 1 February as the start of spring.

Poem: The Clock Poem

I'm in the clock crew and I'm okay!
I tick all night and I tick all day.

I've got two hands, I'm having a ball,
Because I've got no arms at all!

My big hand can move sixty minutes in one hour,
I'm the one with the strength and power.

My small hand isn't quite as fast.
If they were in a race, it would come last!

It takes so long just to get around
(12 hours you know),
It's careful, small, and slow.

Telling the time!

As discussed in **Sheet 15**, use an old clock where the hands can be manipulated by your child. Show your child a time, e.g. half past eight. Ask: *What time is it? Why is it half past 8 o'clock?*
We hope to get an answer something like: *Because when the long hand points to 6 and the short hand points halfway between the 8 and the 9, it is half past 8.*
If you don't get the correct answer, explain the time to your child. Do the same with a number of other hour and half-hour times.

Days of the week

Song: Let's All Sing
(Sung to the tune of 'Frère Jacques')

Here we have
The days of the week
Let's all sing.
Let's all sing.
Monday, Tuesday, Wednesday,
Thursday, Friday, Saturday,
Sunday.
My favourite day!

Naming and ordering months of year

Write out the names of the months of the year on pieces of paper or cut them from an old calendar.

Variation: Get your child to pierce a small hole at the front and end of each month's name, as with the days done earlier in **Sheet 15**. Get him/her to join the different months in order using a piece of string.

Months and seasons

Write the names of the four seasons – spring, summer, autumn and winter – on separate pieces of paper, as done with the months of the year. Ask your child to place the four seasons on the table or floor with one underneath the other, starting with spring. Now, using the 12 months made for the previous activity, ask him/her to place the correct months with the correct season.

Spring: February, March and April
Summer: May, June and July
Autumn: August, September and October
Winter: November, December and January

You can ask such questions as:
- *What is the first month of spring?*
- *How many months are in each season?*
- *What season follows summer?*
- *In what season is St Patrick's Day?*

CJFallon

Individual Pupil Profile Term Assessment Record

Pupil: ______________________ **Teacher:** ______________________

Hallowe'en Assessment (PCMs 123 – 127)

		needs help	good	excellent
1.	Can count the number of objects in a set to 15.			
2.	Can recognise/write numerals 11–15.			
3.	Can read/match the correct numeral to its written name 11–15.			
4.	Can order numerals to 15.			
5.	Can combine sets using two addends within 15.			
6.	Can understand/construct number sentences using two addends within 15.			
7.	Can combine sets using three addends within 15.			
8.	Can understand/construct number sentences using three addends within 15.			
9.	Can solve problems involving two addends within 15.			
10.	Can solve problems involving three addends within 15.			
11.	Can partition sets using two addends within 15.			
12.	Can partition sets using three addends within 15.			
13.	Can combine sets with two addends using the counting on strategy within 15.			
14.	Can combine sets with three addends using the counting on strategy within 15.			
15.	Can recognise a rectangle from a set of 2-D shapes.			
16.	Can recognise a semi-circle from a set of 2-D shapes.			
17.	Can explore, develop and apply the commutative property of addition with totals to 14.			
18.	Can explore, develop and apply the commutative property of addition with totals to 15.			
19.	Can solve word problems with two addends within 15.			
20.	Can solve word problems with three addends within 15.			
21.	Can develop an understanding of subtraction as complementing within 15.			
22.	Can develop an understanding of subtraction as complementing within 15 – word problem.			
23.	Can use the language of ordinal number first to tenth.			
24.	Can recognise pattern, including odd and even numbers.			
25.	Can develop an understanding of subtraction as difference within 15.			
26.	Can develop an understanding of subtraction as deducting within 15.			

Christmas Assessment (PCMs 128 – 133)

		needs help	good	excellent
27.	Can use the language of spatial awareness – above.			
28.	Can use the language of spatial awareness – underneath.			
29.	Can use the language of spatial awareness – right.			
30.	Can use the language of spatial awareness – left.			
31.	Can count the number of objects in a set 1–20.			
32.	Can recognise/write numerals 11–20.			
33.	Can read/match the correct numeral to its written name 15–20.			
34.	Can order numerals to 20.			
35.	Can understand/construct number sentences using two addends within 20.			
36.	Can understand/construct number sentences using three addends within 20.			
37.	Can solve problems involving three addends within 20.			
38.	Can partition sets using two addends within 20.			

Individual Pupil Profile Term Assessment Record

Learning Outcomes

Pupil: ______________________ Teacher: ______________________

		needs help	good	excellent
39.	Can partition sets using three addends within 20.			
40.	Can combine sets with two addends using the counting on strategy within 20.			
41.	Can combine sets with three addends using the counting on strategy within 20.			
42.	Can recognise a 5c coin.			
43.	Can recognise a 10c coin.			
44.	Can recognise and total coins to 10c.			
45.	Can add two addends involving price tags with totals to 10c – vertically.			
46.	Can solve practical tasks and problems using coins up to 10c with totals to 15c.			
47.	Can estimate, measure and record length using non-standard units of measurement.			
48.	Can estimate, measure and record length using non-standard units of measurement.			
49.	Can compare lengths using non-standard units of measurement.			
50.	Can solve word problems with two addends within 20.			
51.	Can solve word problems with three addends within 20.			
52.	Can recognise a set that has more than a given set within 20.			
53.	Can recognise and name 3-D shapes – cuboid.			
54.	Can recognise and name 3-D shapes – sphere.			
55.	Can recognise and name 3-D shapes that can/cannot be stacked.			
56.	Can read, write and order numerals 0–20.			
57.	Can order three numbers by biggest and smallest.			
58.	Can explore, identify and record place value 0–19.			
59.	Can count in tens and units using concrete materials and pictorial representations.			

February Mid-term Assessment (PCMs 134 – 136)

		needs help	good	excellent
60.	Can recognise and use coins up to 20c coin.			
61.	Can draw the least number of coins to make totals to 20c.			
62.	Can solve practical tasks and problems using coins with totals to 20c.			
63.	Can record place value 0–19 concretely, pictorially and symbolically on the notation board.			
64.	Can record place value 0–19 concretely, pictorially and symbolically on the abacus.			
65.	Can read the time in one-hour intervals.			
66.	Can read the time in half-hour intervals.			
67.	Can recognise and write the days of the week.			
68.	Can read, write and order numerals 1–50 starting with the smallest.			
69.	Can read, write and order numerals 1–50 starting with the biggest.			
70.	Can match the numeral name to the correct numeral 1–49.			
71.	Can record place value 0–50 concretely and pictorially on the notation board.			
72.	Can record place value 0–50 concretely and pictorially on the abacus.			
73.	Can identify half of a regular shape.			
74.	Can share sets of objects equally.			
75.	Can solve simple word problems involving fractions within 20.			

Individual Pupil Profile Term Assessment Record

Pupil: ______________________ Teacher: ______________________

Easter Assessment (PCMs 137 – 139)

		needs help	good	excellent
76.	Can construct a simple pictogram of four columns.			
77.	Can interpret data from a pictogram.			
78.	Can develop an understanding of subtraction as complementary addition within 20.			
79.	Can develop an understanding of subtraction as difference within 20.			
80.	Can develop an understanding of subtraction as deducting within 20.			
81.	Can read, write and order numerals up to 99 starting with the smallest.			
82.	Can read, write and order numerals up to 99 starting with the biggest.			
83.	Can match the numeral name to the correct numeral up to 99.			
84.	Can record place value 0–99 concretely, pictorially and symbolically.			
85.	Can compare, measure and record weight using non-standard units – heaviest.			
86.	Can compare, measure and record weight using non-standard units – lightest.			
87.	Can compare, measure and record weight using the kilogramme.			
88.	Can count in twos.			
89.	Can count in fives.			
90.	Can count in tens.			
91.	Can recognise pattern on the hundred square.			
92.	Can add a one-digit number to a two-digit number without regrouping.			
93.	Can solve word problems using the mental strategy of adding tens only.			
94.	Can round numbers up to the nearest ten.			
95.	Can round numbers down to the nearest ten.			

Summer Assessment (PCMs 140 – 142)

		needs help	good	excellent
96.	Can understand the language of capacity.			
97.	Can estimate/measure capacity using the litre.			
98.	Can add a two-digit number to a two-digit number without regrouping within 99.			
99.	Can add a one-digit number to a one-digit number with regrouping.			
100.	Can add a one-digit number to a two-digit number with regrouping within 99.			
101.	Can solve word problems by adding a one-digit number to a two-digit number with regrouping within 99.			
102.	Can add a two-digit number to a two-digit number with regrouping within 99.			
103.	Can solve word problems by adding a two-digit number to a two-digit number with regrouping within 99.			
104.	Can recognise and use coins up to 50c coins within 99c.			
105.	Can draw the least number of coins to make totals to 99c.			
106.	Can solve practical tasks and problems using coins with totals to 99c.			
107.	Can subtract a two-digit number from a two-digit number within 99 without renaming.			
108.	Can solve problems by subtracting a two-digit number from a two-digit number within 99 without renaming.			
109.	Can show the time half an hour earlier/later than a given time.			
110.	Can recognise the months and seasons of the year.			

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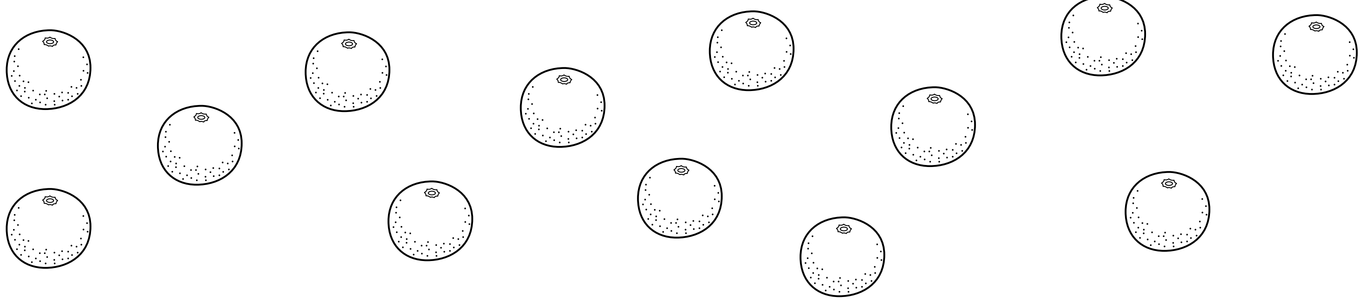
Hallowe'en Assessment

Learning outcomes 1–4

1. **How many** oranges are there? ☐



2. **Fill in** the missing numbers.

1	2	3		5		7		9			12		14	

3. **Colour** the correct number name.

13 = **fourteen** **eleven** **thirteen**

4.

11	12	13	14	15

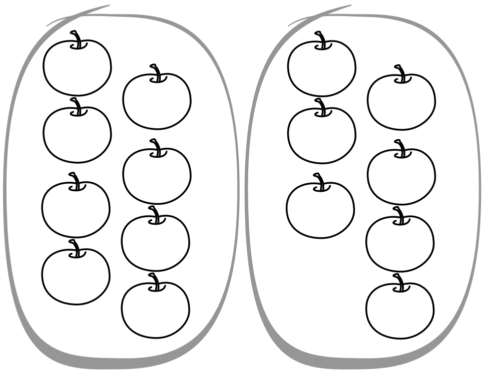
The number 12 comes just before ☐ .

Name: ______________________ Date: ______________

Hallowe’en Assessment

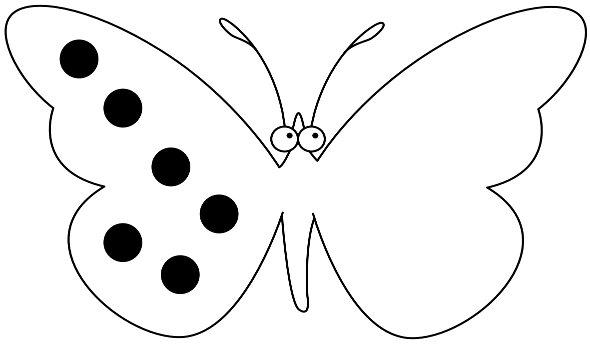
Learning outcomes 5–10

5. Count. Add. Write.



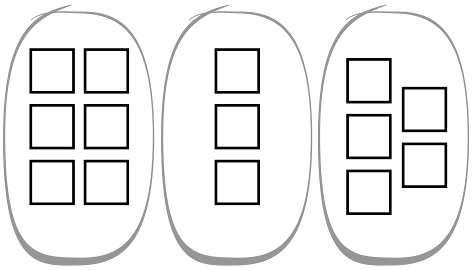
☐ + ☐ = ☐

6. Draw counters to make 14. **Add.**



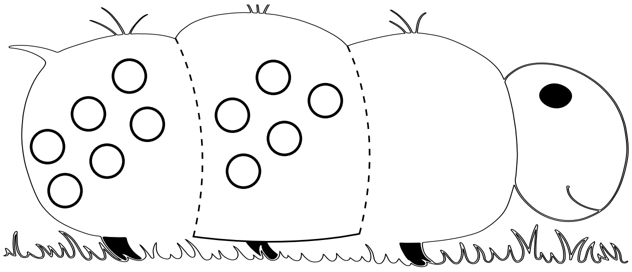
☐ + ☐ = 14

7. Count. Add. Write.



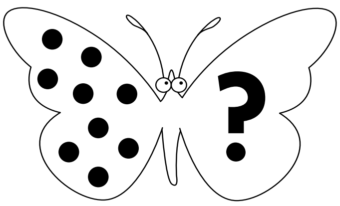
6 + 3 + ☐ = ☐

8. Draw circles to make 15. **Add.**



6 + ☐ + ☐ = 15

9. A butterfly has 14 spots altogether. She has 9 spots on one wing.



How many spots are on the other wing? ☐

10. A caterpillar has 13 spots altogether.
It has 6 green spots, 5 blue spots and the rest are yellow.

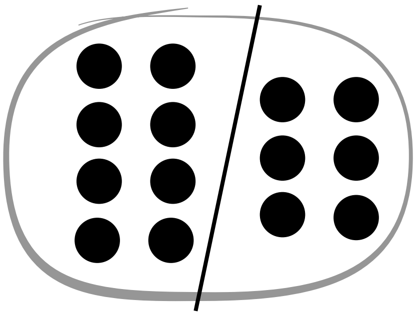
How many yellow spots does it have? ☐

Name: ____________________ Date: ____________

Hallowe'en Assessment

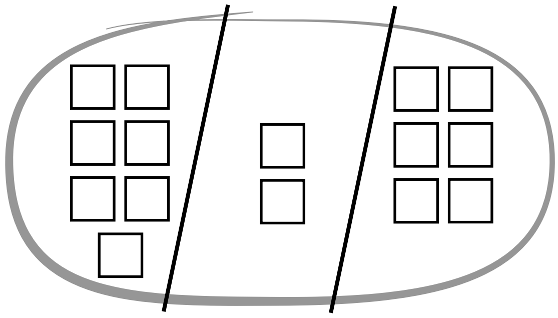
Learning outcomes 11–16

11. Count. Add. Write.



14 = 8 + ☐

12. Count. Add. Write.



15 = 7 + ☐ + ☐

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

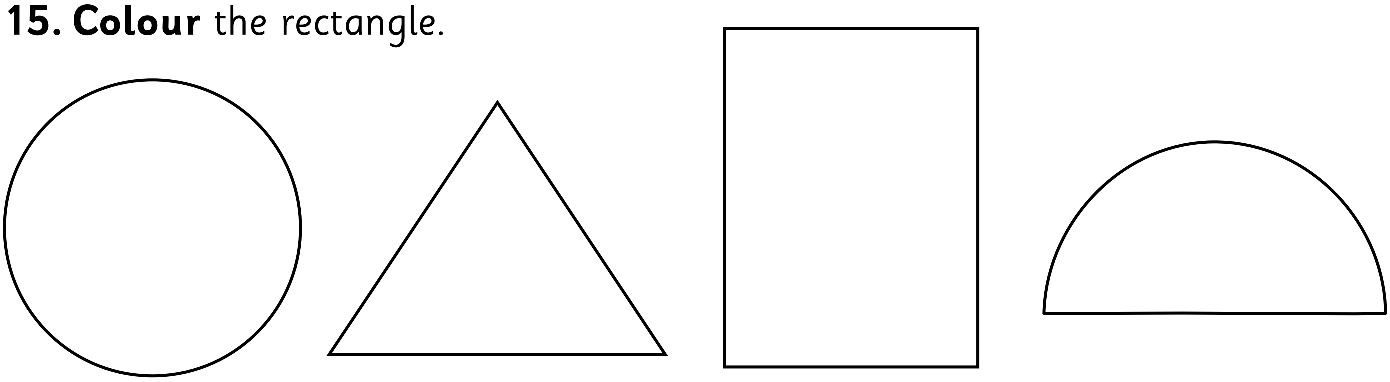
13. Complete.

9 + 5 = ☐

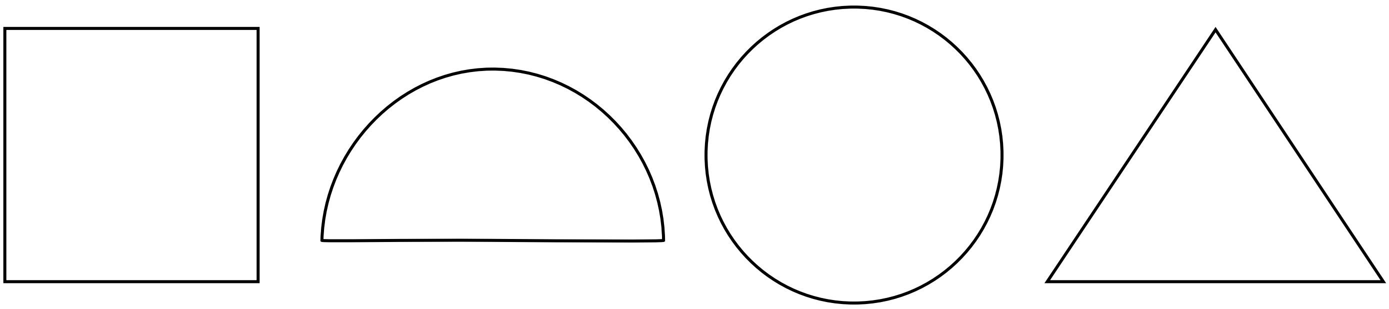
14. Complete.

6 + 5 + 4 = ☐

15. Colour the rectangle.



16. Colour the semi-circle.



Name: ______________________ Date: ______________

Hallowe'en Assessment

Learning outcomes 17–23

17. Complete.

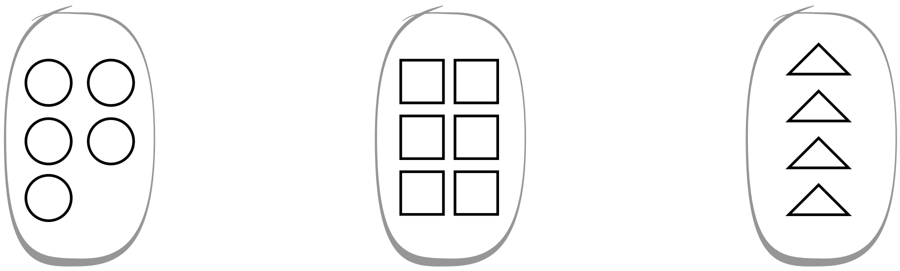
$9 + \square = 14$

$\square + 5 = 14$

18. Complete.

$7 + \square = 15$

$8 + \square = 15$



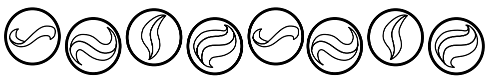
19. There are $\square$ circles and triangles altogether.

20. There are $\square$ shapes altogether.

21. Complete.

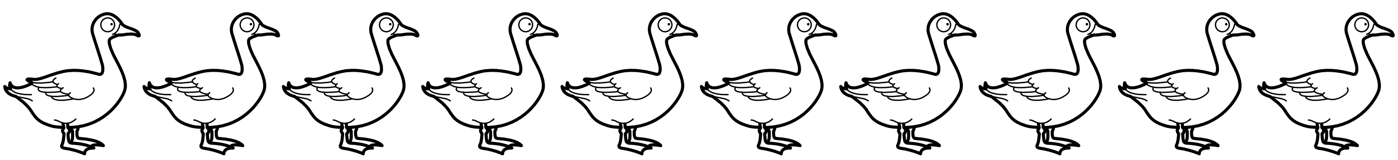
$9 + \square = 13$

22. Cian has 8 marbles. He needs 14 marbles altogether.



How many more marbles does he need to get? $\square$

23. **Colour** the fifth duck yellow. **Colour** the ninth duck red.



1st **10th**

Name: ______________________ Date: ______________

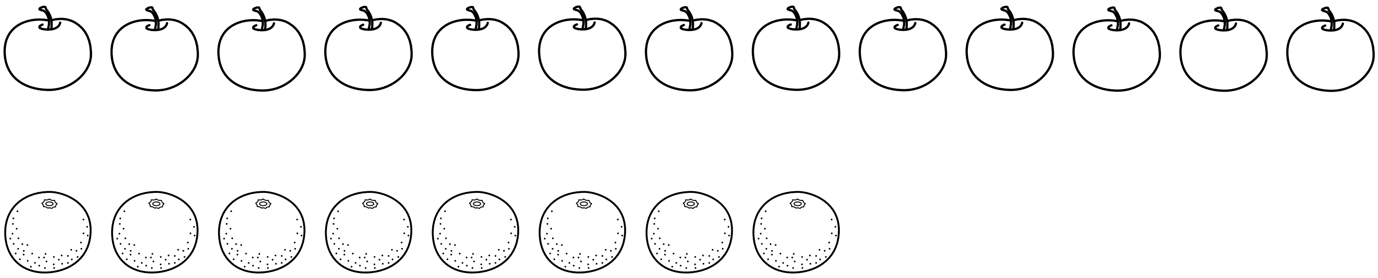
Hallowe'en Assessment

Learning outcomes 24–26

24. Colour the odd numbers only.

1	**2**	**3**	**4**	**5**	**6**	**7**	**8**

25. 13 is more than 8 by $\square$.



26. There were 14 balloons. 6 of them burst.
How many good balloons are left?

$\square - \square = \square$

Name: ______________________ Date: ______________

Christmas Assessment

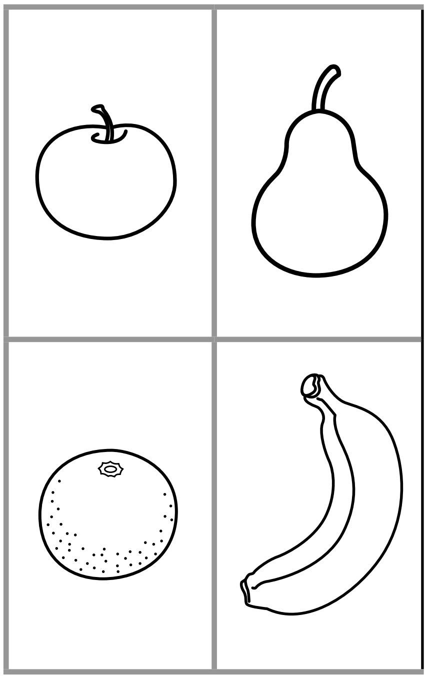
Learning outcomes 27–32

27. The ______________ is above the orange.

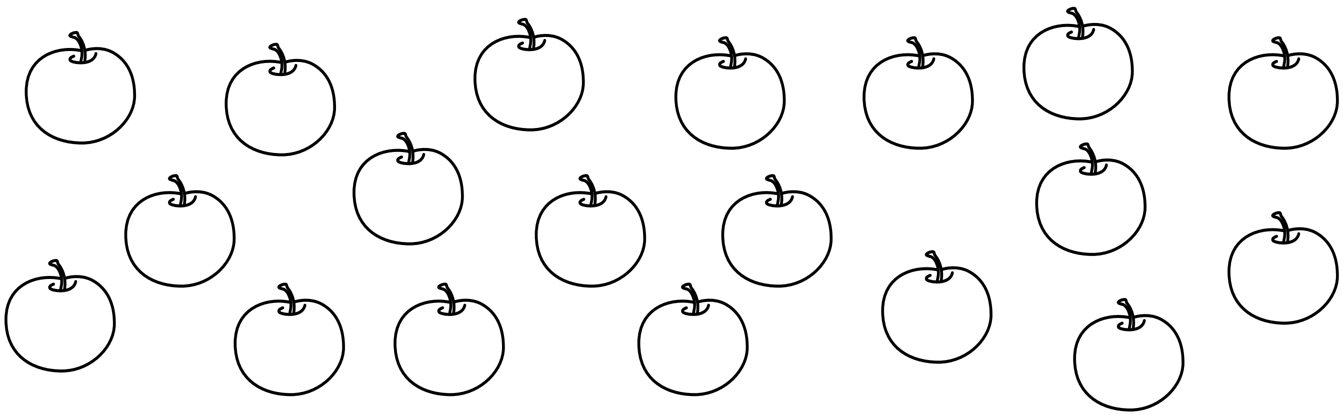
28. The ______________ is underneath the pear.

29. The ______________ is to the right of the apple.

30. The ______________ is to the left of the banana.



31. How many apples are there? ☐



32. Fill in the missing numbers.

11		13	14		16		18		

Name: ______________________________ Date: ________________

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Christmas Assessment

Learning outcomes 33–37

33. Colour the correct number name.

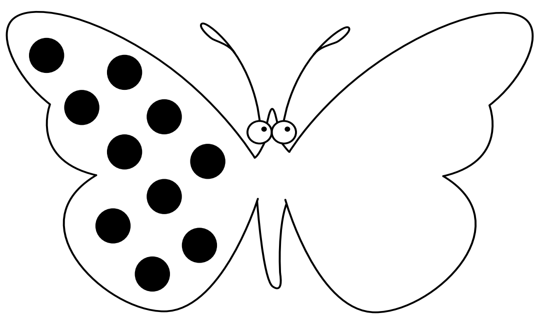
18 = twenty | eighteen | nineteen

34.

15	16	17	18	19	20

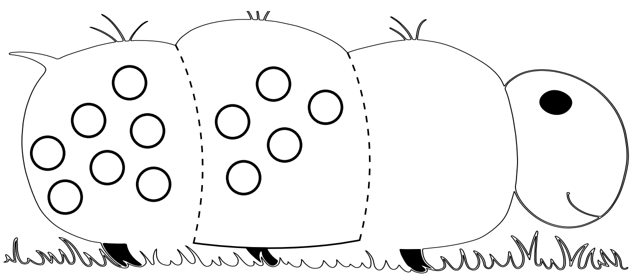
The number 19 comes between ☐ and ☐.

35. Draw counters to make 19. **Add.**



☐ + ☐ = ☐

36. Draw circles to make 18. **Add.**



☐ + ☐ + ☐ = ☐

37. A caterpillar has 17 spots altogether. It has 7 red spots and 6 pink spots. The rest are orange. **How many** orange spots does the caterpillar have?

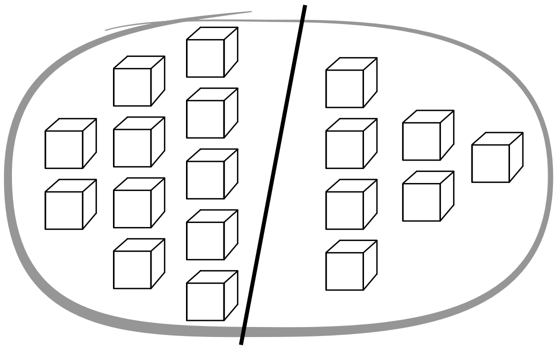
☐

Name: ____________________ Date: ____________

Christmas Assessment

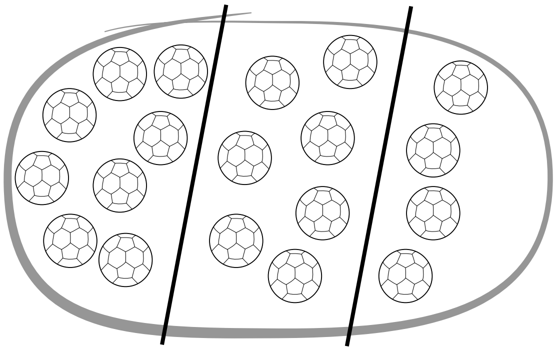
Learning outcomes 38–43

38. Complete.



18 = ☐ + ☐

39. Complete.



19 = ☐ + ☐ + ☐

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

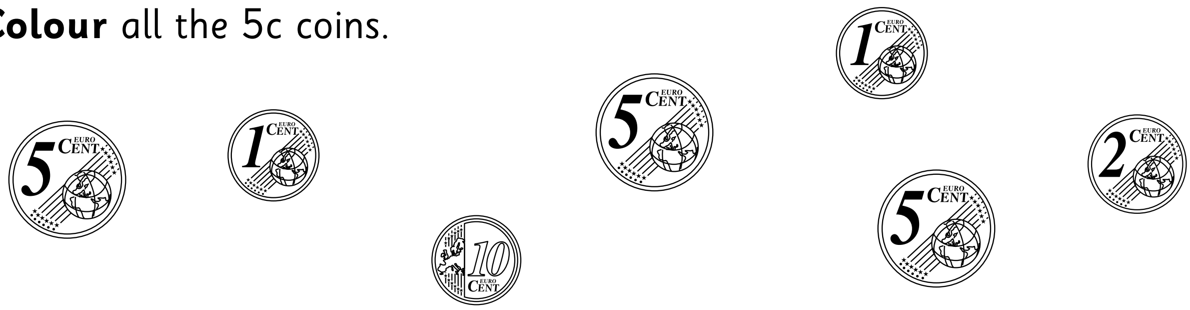
40. Complete.

12 + 6 = ☐

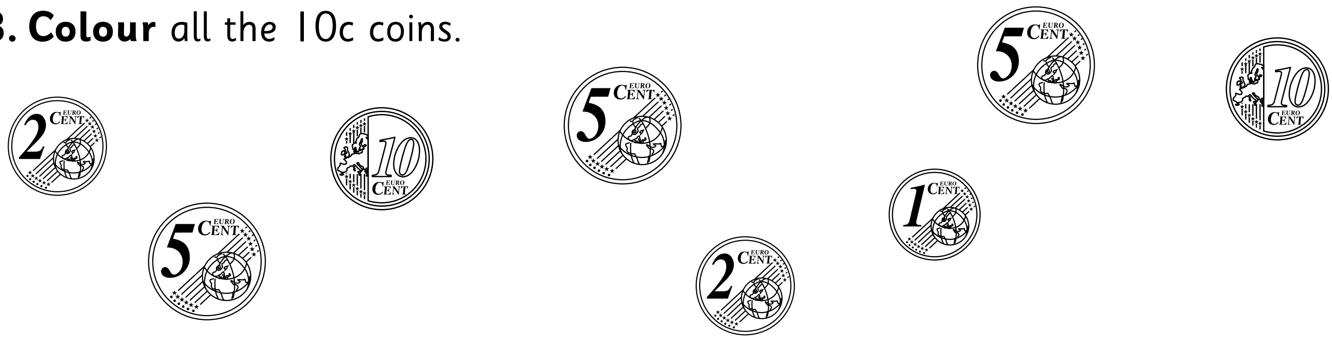
41. Complete.

7 + 9 + 3 = ☐

42. Colour all the 5c coins.



43. Colour all the 10c coins.



Name: ____________________ Date: ____________

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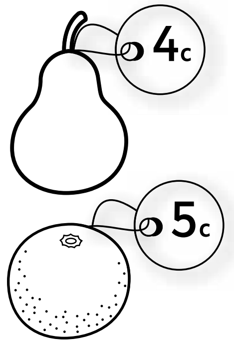
Christmas Assessment

Learning outcomes 44–52

44. How much money is in the box?

☐ c

45. How much? Add.



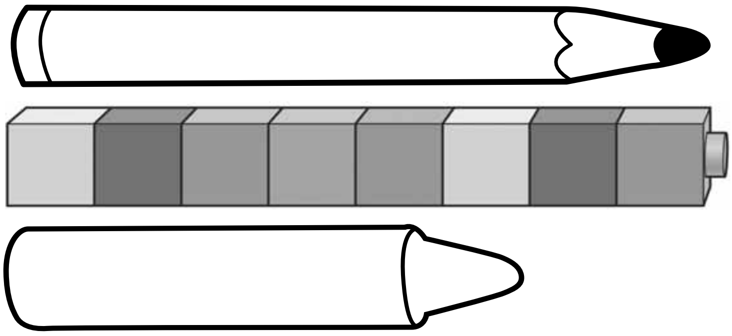
$$\begin{array}{r} 4c \\ +\ 5c \\ \hline \end{array}$$

☐ c

46. Cian has . Sofia has .

How much money have they altogether?

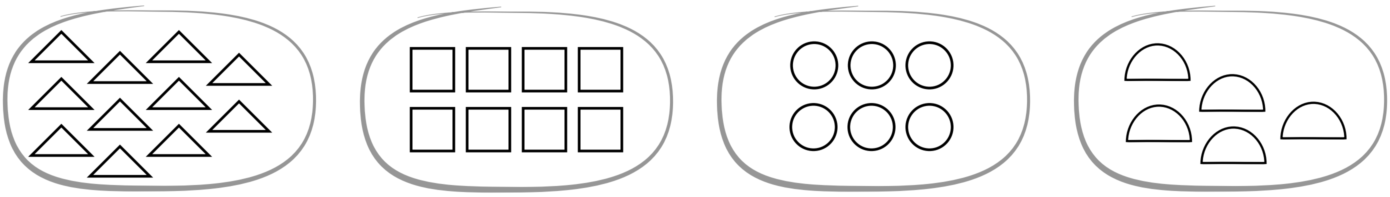
☐ c



47. The pencil is ☐ cubes long.

48. The crayon is ☐ cubes long.

49. The crayon is ☐ cubes shorter than the pencil.



50. There are ☐ triangles and squares altogether.

51. There are ☐ squares, circles and semi-circles altogether.

52. There are ☐ more triangles than circles.

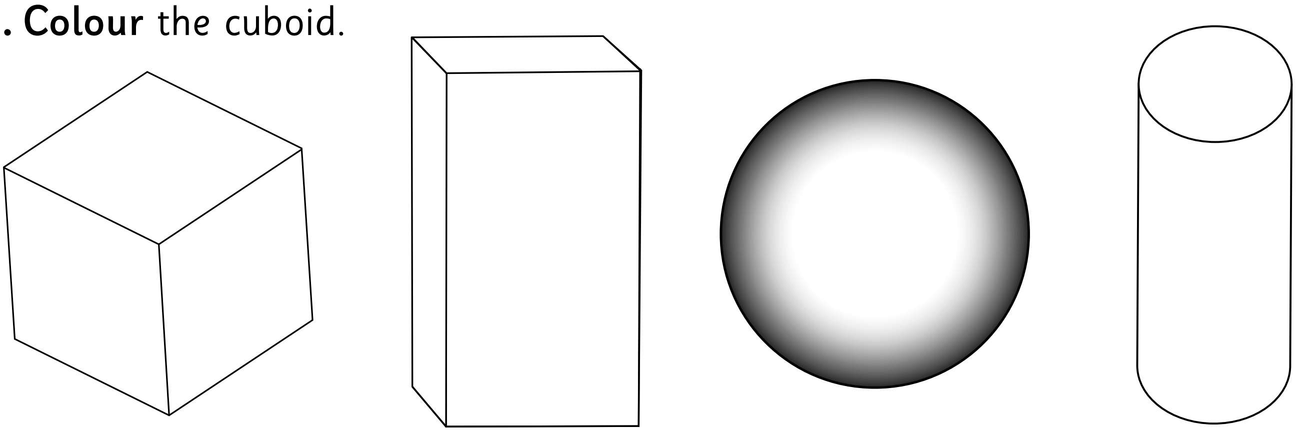
Name: ____________________ Date: ____________

CJFallon

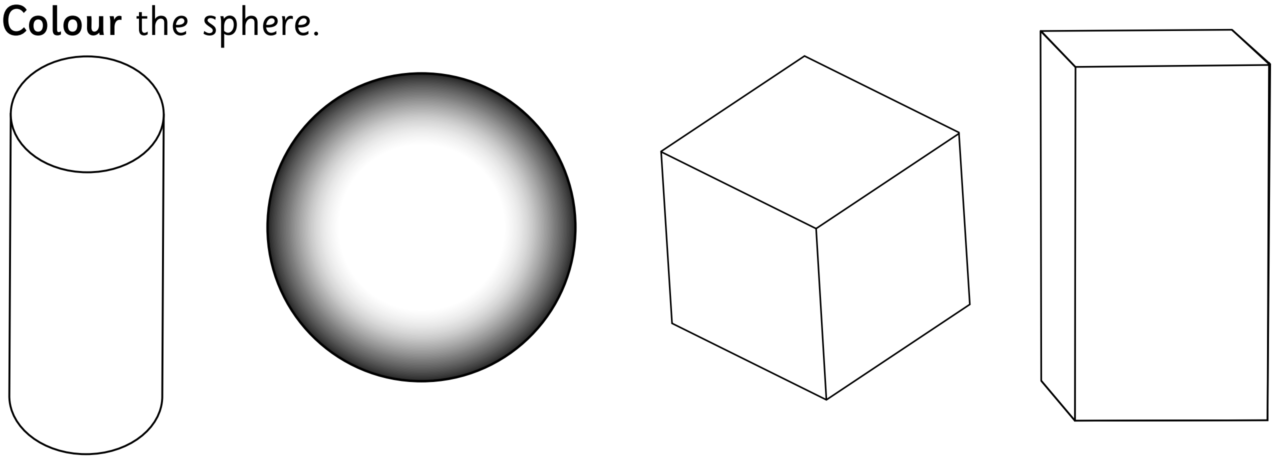
Christmas Assessment

Learning outcomes 53–57

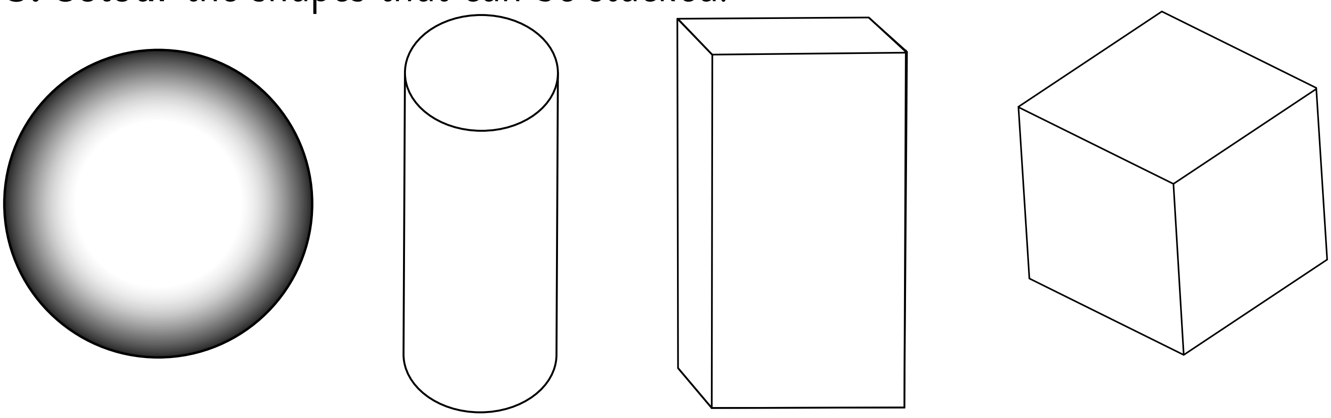
53. Colour the cuboid.



54. Colour the sphere.



55. Colour the shapes that can be stacked.



56. Write the missing numbers.

	15		**17**			**20**

57. Order the numbers starting with the biggest.

18 14 19

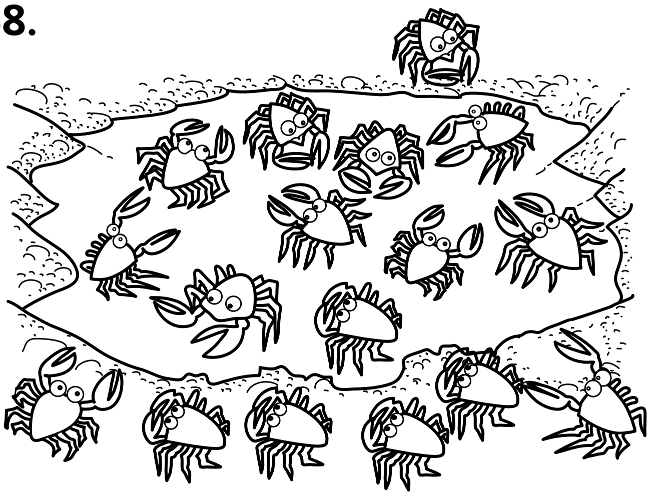
___ ___ ___

Name: ______________________ Date: ______________

Christmas Assessment

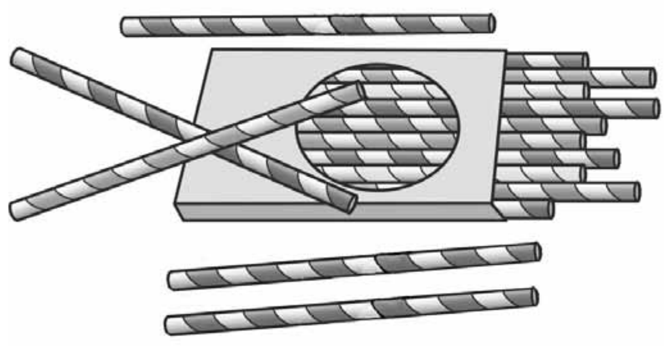
Learning outcomes 58–59

58.



| 17 | = | | ten and | | units. |

59.



There are [ ] straws altogether.

Name: ______________________ Date: ______________

February Assessment

Learning outcomes 60–66

60. How much money is in the box?

☐ c

61. Draw the least number of coins needed to make 19c.

62. Paula has . Sofia has .

How much money have they altogether? ☐ c

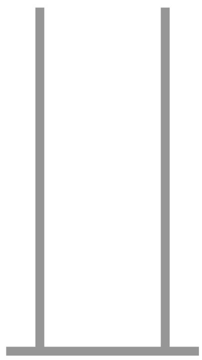
63. Write the correct numeral.

t	u
	●
	●
	●
	●
	●
	●
●	●

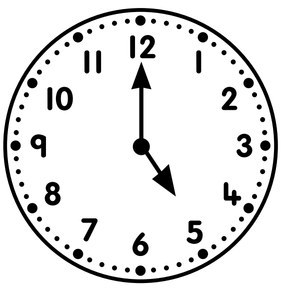
☐

64. Show the number 16 on the abacus.

t u

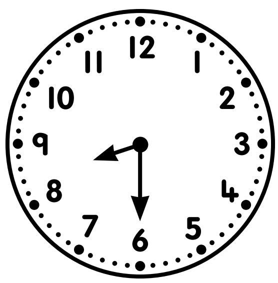


65.



It is ☐ o'clock.

66.



It is ½ past ☐.

Name: ____________________ Date: ______________

CJFallon

February Assessment

Learning outcomes 67–72

67. **Monday** | **Thursday** | **Saturday**

Today is Wednesday. Tomorrow will be ______________________________ .

68. Circle the smallest number.

28 15 35

69. Circle the biggest number.

49 36 24

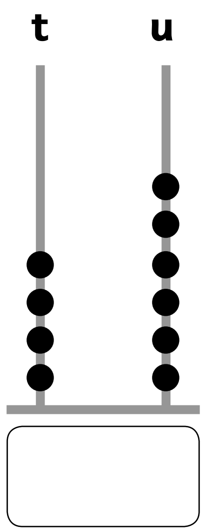
70. Write the correct numeral.

Thirty-seven = ☐

71. Show the number 27 on the notation board.

t	u
2	**7**

72. Write the correct numeral.

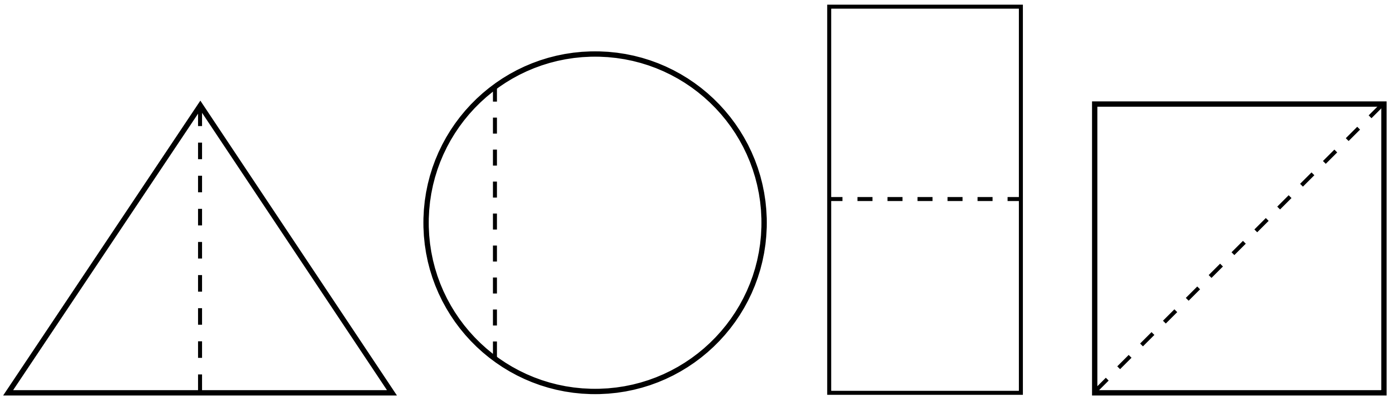


Name: ______________________________ Date: ____________________

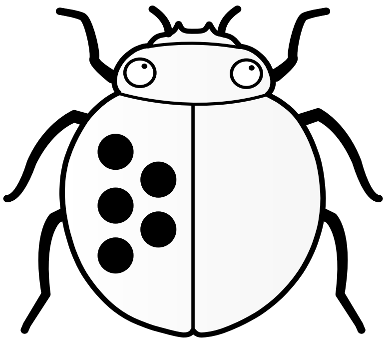
February Assessment

Learning outcomes 73–75

73. Colour the shape that doesn't show two equal parts.



74. Draw. Write.

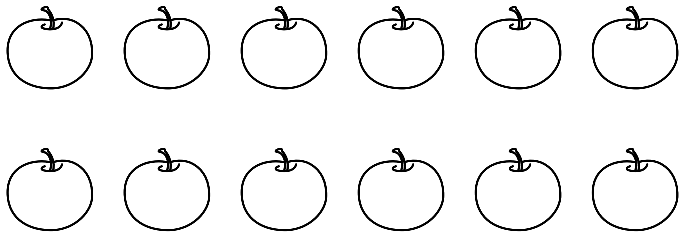


5 + ☐ = 10

So, ½ of 10 is ☐.

75. Cian had 12 apples. He gave half of them to Sue.

Sue has ☐ apples.

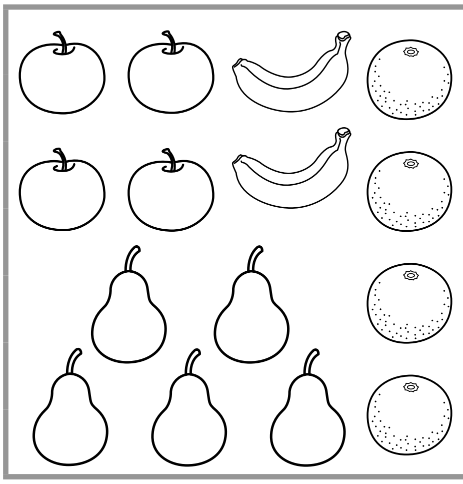


Name: ______________________ Date: ______________

Easter Assessment

Learning outcomes 76–83

76. Colour the blocks to show how many of each fruit there is.



apple	**banana**	**pear**	**orange**

77. How many more pears are there than bananas? ☐

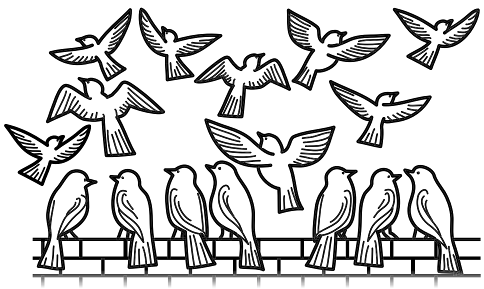
78. Complete the number sentence.

8 + 4 + ☐ = 18

79. Complete the number sentence.

15 – 8 = ☐

80.



There were 16 birds on a wall. 9 flew away.

How many birds are left on the wall.

☐ – ☐ = ☐

81. Circle the smallest number.

58 53 79 97

82. Circle the biggest number.

47 74 87 78

83. Write the correct numeral.

Eighty-five = ☐

Name: ____________________ Date: ____________

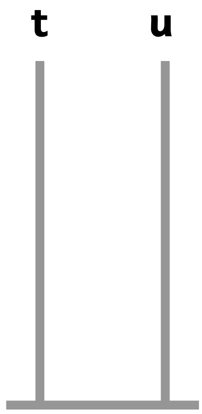
Easter Assessment

Learning outcomes 84–90

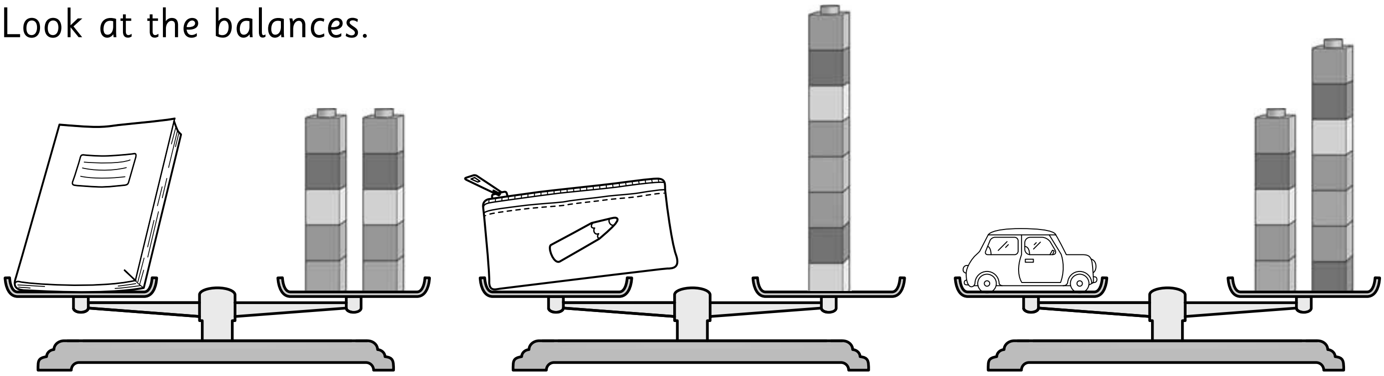
84. Count. Write. Draw.

t	u
●	
●	
●	
●	●
●	●
●	●
●	●

→ $\boxed{70}$ + $\boxed{}$ = $\boxed{}$ →



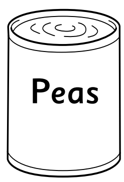
Look at the balances.

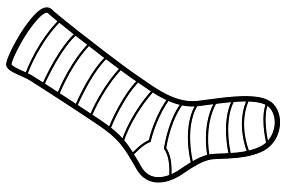


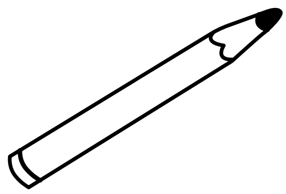
85. The ______________________ is the heaviest.

86. The______________________ is the lightest.

87. Colour the item that weighs about 1 Kilogramme (kg).







Fill in the missing numbers.

88.	6	8	10				18	20		24
89.	5		15	20			35		45	
90.	0	10	20			50				90

Name: ______________________ Date: ______________

Easter Assessment

Learning outcomes 91–95

91. Fill in the missing numbers from this section of the hundred square.

16		**18**
	27	
		38

92. Add.

	t	u
	4	2
+		7

93. Tina had 23 apples.
Alan had 20 apples.
How many apples had they altogether?

94. Circle the correct number.

Round 28 to the nearest 10. **20** **40** **30**

95. Circle the correct number.

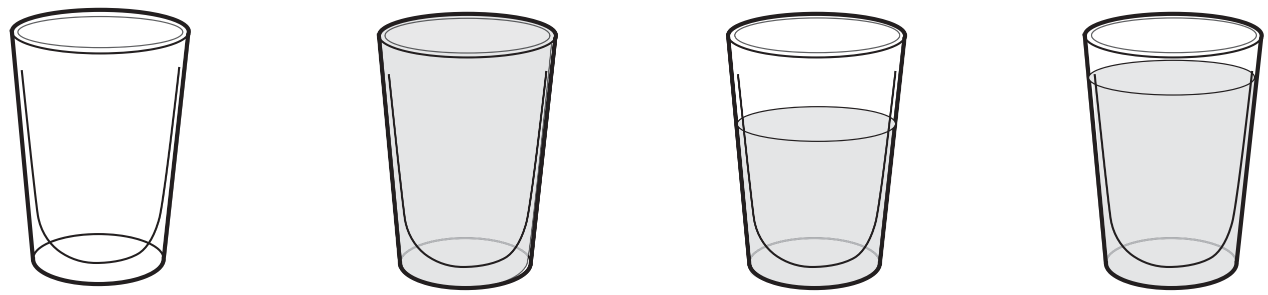
Round 41 to the nearest 10. **30** **40** **50**

Name: ____________________ Date: ____________

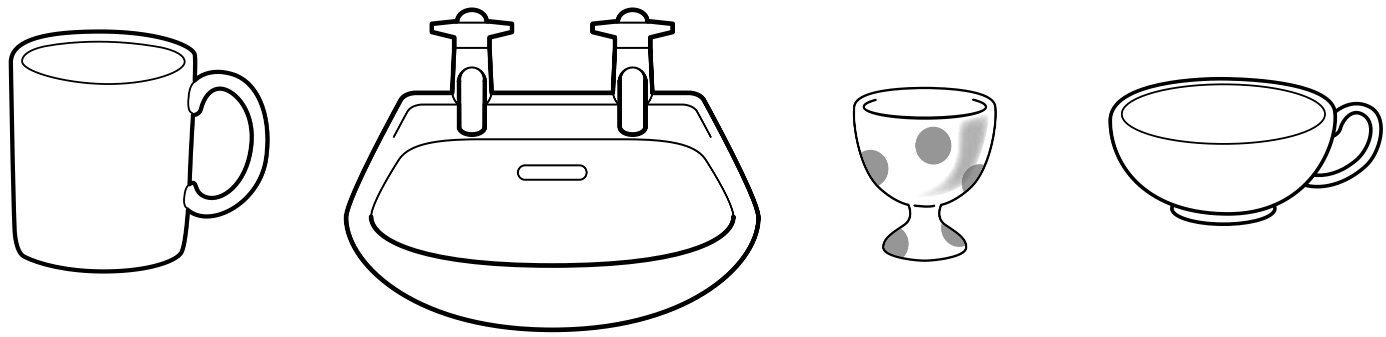
Summer Assessment

Learning outcomes 96–101

96. Ring the container that is nearly full.



97. Colour the container that holds more than a litre.



98. Add.

	t	u
	3	4
+	2	5

99. Add.

	t	u
		8
+		7

100. Add.

	t	u
	3	6
+		9

101. Tommy collected 56 shells. Timmy collected 8 shells.

How many shells did they collect altogether?

	t	u
+		

Name: ______________________ Date: ______________

Summer Assessment

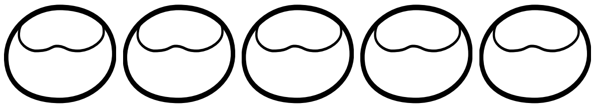
Learning outcomes 102–108

102. Add.

	t	u
	5	8
+	2	6

103. Mary had 29 conkers and Ronan had 27 conkers.

How many conkers did they have altogether?



	t	u
+		

104. How much money is in the box?

c

105. Draw the least number of coins to make 77c.

106. Máire has . Cian has .

How much money have they between them? c

107.

	t	u
	4	8
–	1	5

108. Max had 37 marbles.
He lost 25 of them.

How many marbles has he now?

	t	u
–		

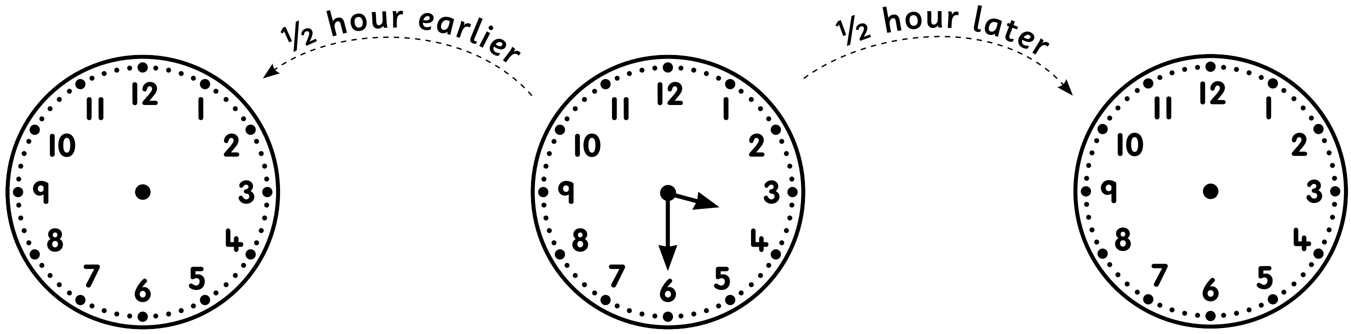
Name: ______________________ Date: ______________

CJFallon

Summer Assessment

Learning outcomes 109–110

109. Draw hands on the clock faces to show half an hour earlier and half an hour later than the middle clock. **Write** the times.



______________ ☐ past ☐ ______________

110. The months of spring are ____________________, March and April.

Name: ______________________________ Date: _______________