




## Key Stage 2 Weekly Learning

<b>Year 3, Hazel and Sycamore</b>	<b>Theme: The Arctic</b> <b>Science: Investigations</b>	<b>Week beginning: 15/6/2020</b>
<b>Daily Activities</b> Have a look at this site for lots of daily activities some of which are listed in our home learning but others you may want explore too! <a href="https://blog.kidadl.com/articles/lockdown-lessons-led-by-celebs">https://blog.kidadl.com/articles/lockdown-lessons-led-by-celebs</a>		
Wake up & Shake up	Exercise with Joe Wicks (online videos), go for a walk, run or dance.	
<b>Reading</b> - 10- 20 mins	Continue to enjoy reading book from home, school or online. The work this week is based on the story Varjak Paw by S.F.Said. You do not need the book - all the tasks are within the sheets provided. This week focus on Task 1, and 2.	
<b>Maths</b> - 20- 30 mins	This week we are looking at multiplication. Use the sheets provided to practise your mental multiplication strategies and solve multiplication problems. There are two games that you can use to practise with a member of your family. If you are looking for an extra challenge have a look at this NRICH task: <a href="https://nrich.maths.org/223">https://nrich.maths.org/223</a>	
<b>BREAK</b>	Eat a healthy snack, exercise or relax with some mindfulness.	
<b>Tues and Thurs @11</b> Story time with your favourite author	Spend some time each week listening to your favourite author reading to you. Here is the link to David Walliams that we thought you would enjoy. <a href="https://www.worldofdavidwalliams.com/elevenses/">https://www.worldofdavidwalliams.com/elevenses/</a>	
<b>Times Tables</b> - 10 - 15 mins	Log on to Time Tables Rock Stars or a similar Maths website to practise your tables.	
<b>Spelling</b> - 5 - 10 mins	Choose 10 Common Exception Words to practise this week.	
<b>Handwriting</b> - 5 - 10 mins	Use your handwriting book to practise your 10 spellings.	
<b>Writing</b> - 15 - 20 mins	Write a biography about Robert Peary from your Geography research. A biography is an account of someone's life. Listed below are the features of a biography.	
<b>Our School Value</b>		This term our value is <b>Cooperation</b> . Try synchronised drawing in pairs. Divide an A4 piece of paper in half. One person draws half of an object e.g. a boat while the other person mirrors this drawing. Remember to draw slowly so that the other person can mirror effectively.

These are the Key Skills that we are teaching in Year 3. They are the skills we work with across the school year. To support your understanding of home learning tasks we have highlighted the skills that we are focussing on each week. The other skills you will notice are also relevant to work your child is doing at this time and will provide support for them to succeed.

Key Mathematical skills	Key Reading skills	Key Writing skills
<ul style="list-style-type: none"> <li>Count in 2's, 3's, 4's, 5's and 10's</li> <li>x2, x3, x4, x5, x8 x10</li> <li>Order numbers to 1000</li> <li>Order fractions</li> <li>Solve addition and subtraction questions up to 3 digits</li> <li>Add and subtract fractions</li> <li>Identify equivalent fractions</li> <li>Write x and ÷ statements</li> <li>Double and halve 2 and 3 digit numbers</li> <li>Estimate, read and compare time</li> <li>Tell analogue and digital times</li> </ul>	<ul style="list-style-type: none"> <li>Use phonics to decode new words.</li> <li>Summarise what has been read</li> <li>Predicting what will come next</li> <li>Sharing opinions using the text</li> <li>Retrieving facts</li> <li>Making inferences (e.g. I think she is feeling sad because she was sitting by herself)</li> <li>Identify the meaning of new words</li> </ul>	<ul style="list-style-type: none"> <li>Capital letters at the start of a sentence and for proper nouns</li> <li>Neat, joined handwriting</li> <li>Conjunctions to join ideas (and/but/so/because/which)</li> <li>Adjectives to describe</li> <li>Using past or present tense</li> <li>Using 1<sup>st</sup> person (I) or 3<sup>rd</sup> person (he/she/they)</li> <li>Inverted commas for speech ""</li> <li>Adverbs (then/next/after)</li> <li>Prepositions (below/in front of/under)</li> </ul>

<ul style="list-style-type: none"> <li>• Add and subtract amounts of money using £ and giving change</li> <li>• Identify 2-D and 3-D shapes and describe their properties</li> <li>• <b>Check my answers</b></li> </ul>		
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Weekly Activities		
<p><b>Geography and Art</b></p> <p>Our Theme this term is the Arctic. This week we are going to research Robert Peary, a famous explorer who claimed to reach the North Pole. To help you with your writing think about:</p> <ul style="list-style-type: none"> <li>-when he was born</li> <li>-where he was born</li> <li>-his job</li> <li>-expedition to the North Pole</li> </ul> <p><a href="https://kids.kiddle.co/Robert_Peary">https://kids.kiddle.co/Robert_Peary</a></p> <p><a href="https://kids.britannica.com/kids/article/Robert-E-Peary/400070#:~:text=Peary%20was%20the%20most%20famous,He%20grew%20up%20in%20Maine.">https://kids.britannica.com/kids/article/Robert-E-Peary/400070#:~:text=Peary%20was%20the%20most%20famous,He%20grew%20up%20in%20Maine.</a></p> <p>In Art this week we are going to creating ice art. This could involve using coloured ice cubes to build a sculpture or freezing an object in ice. Look at the images below for some inspiration! There are also some websites below to give you some ideas. We look forward to seeing your work!</p> <p>Remember to be careful if you are hanging ice as it will be heavy.</p> <p><a href="https://www.getoutwiththekids.co.uk/activities/making/creating-ice-sculptures/">https://www.getoutwiththekids.co.uk/activities/making/creating-ice-sculptures/</a></p>	<p><b>Science</b></p> <p>In Science this term we are going to set you a series of investigations. All great scientists love to investigate. We have seen some wonderful examples of investigations you have been carrying out at home so we feel sure you will enjoy the investigations we have in store for you over the coming weeks.</p> <p><b>Investigation of the Week!-Choose one from below</b></p> <p><u>How do animals survive in the Arctic?</u> Have a go at the investigation 'Blubber Gloves' to see how animals like the walrus have adapted to a cold environment. Keep or hand in the water until it feels very cold and time how long you kept your hand in. You do not have to use ice.</p> <p><u>How could humans survive in the Arctic?</u></p> <p><b><u>This activity must be completed with an adult as it involves warm liquids- Do not use boiling water.</u></b></p> <p>Humans in cold environments need to wear clothes that keep us warm. Watch this video to learn about insulators:</p> <p><a href="https://www.bbc.co.uk/bitesize/clips/zkntsbk">https://www.bbc.co.uk/bitesize/clips/zkntsbk</a></p> <p>Have a go at the insulation experiment with an adult to work out which material might be useful for clothing in the Arctic. Talk to an adult about the investigation using the discussion questions.</p>	
<p><b>RE</b></p> <p>Our theme for RE this term is Charity.</p> <p>This week we are going to look at one charity. At this time, lots of charities are working to support communities. The Salvation Army are working hard to support families in our local area and all over the country. What is the foundations of this organisation and what do they do? How have The Salvation Army supported the local community? Remember to look at the school and nuture Twitter pages, with an adult, to find out more.</p>	<p><b>Computing</b></p> <p>This term you can develop your typing skills using Purple Mash. This week focus on: CVC and High Frequency</p> <p>Another site to use is Typing Club</p> <p><a href="https://www.typingclub.com/">https://www.typingclub.com/</a></p> <p>We are also going to explore algorithms. An algorithm is a set of rules for completing a task. Have a look at the link below to create your own algorithm in dance moves. You do not need to use a computer for this task. The dance cards are included in this pack.</p> <p><a href="https://www.barefootcomputing.org/homelearning">https://www.barefootcomputing.org/homelearning</a></p>	
<p><b>Jigsaw</b></p> <p>This week we are thinking about Gifts of Gratitude. What does the word grateful mean?</p> <p>You may have seen or joined in with Clap for Carers in recent weeks.</p> <p>Write down the names of people of roles of people that you are grateful for. It could be a family member, school staff member, a place (like school) a medical professional or a friend. Think about what these people do that you might feel grateful for. Is there anything that you have done or said that someone else might feel grateful for during this time?</p>		

# *Features of a Biography*

## Purpose:

*To give an account of someone's life*



## Structure:

- ✎ Opening statement introduces the subject, and explains why he/she is known*
- ✎ Significant events are ordered chronologically (time order)*
- ✎ Closing statement explains how this person will be remembered, and sometimes gives the writer's opinion*

## Language Features:

- ✎ Refers to named individuals*
- ✎ Written in the past tense*
- ✎ Can include direct and indirect speech and quotes from other sources*
- ✎ Written in 3<sup>rd</sup> person*
- ✎ Includes time connectives to link ideas*
- ✎ Events are written like a story (rather than lists of facts) and engage the reader*

## Ice Art





# Multiplication facts – multiplying any number by 10

When we multiply a number by 10, the number gets 10 times bigger. This means that each digit moves one place value column to the left and we need to use 0 as a placeholder in the ones column.

Hundreds	Tens	Ones
		2
	2	0

$2 \times 10 = 20$

- 1 Show how the digits all move along when they are multiplied by 10 and write the answers below:

a

Hundreds	Tens	Ones
		7
	7	0

$7 \times 10 = \boxed{\phantom{00}}$

b

Hundreds	Tens	Ones
		3

$3 \times 10 = \boxed{\phantom{00}}$

c

Hundreds	Tens	Ones
	1	5

$15 \times 10 = \boxed{\phantom{00}}$

d

Hundreds	Tens	Ones
	2	2

$22 \times 10 = \boxed{\phantom{00}}$

- 2 Connect these  $\times 10$  facts to the answers:

$16 \times 10$

$62 \times 10$

$93 \times 10$

$99 \times 10$

$13 \times 10$

220

510

930

990

850

160

130

620

720

980

$72 \times 10$

$51 \times 10$

$85 \times 10$

$22 \times 10$

$98 \times 10$

# Mental multiplication strategies – doubling strategy

There are many doubling number facts that make mental calculations easier if you know them by heart.

This includes numbers outside the times tables that we have been working on.

Here are 2 double facts that are handy to know:

double 20 is 40

double 15 is 30

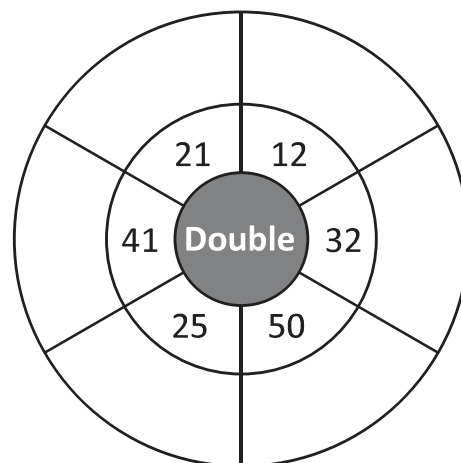
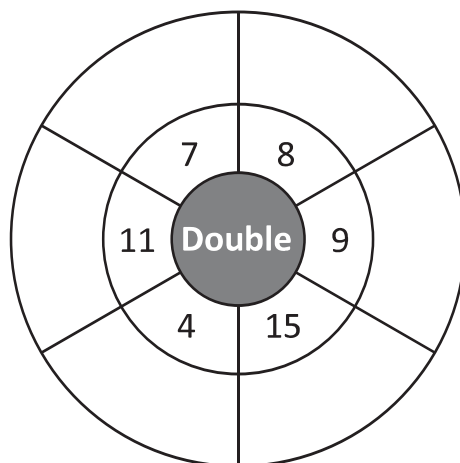
Can you think of more?

- 1** List all the double facts outside of the 2 times table that you know in the space below. Here are two to start you off:

double 12 is 24

double 50 is 100

- 2** Complete these doubling wheels:



- 3** Doubling 2-digit numbers is easy if you split the digits and double each part. Complete this doubling table. The first one has been done for you.

<b>a</b> Double 36 $= 30 \times 2 + 6 \times 2$ $= 60 + 12$ $= 72$	<b>b</b> Double 23
<b>c</b> Double 19	<b>d</b> Double 41

# Mental multiplication strategies – doubling strategy

- 4** The double-double strategy is when you multiply by 4. Look at double-double 2: double 2 once is 4 and double 2 twice is 8.

Practise using the double-double strategy with these tables. The first one is done for you.

**a**

$7 \times 4 =$	<input type="text" value="28"/>
Double 7 once	14
Double 7 twice	28

**b**

$15 \times 4 =$	<input type="text"/>
Double 15 once	
Double 15 twice	

**c**

$21 \times 4 =$	<input type="text"/>
Double 21 once	
Double 21 twice	

**d**

$12 \times 4 =$	<input type="text"/>
Double 12 once	
Double 12 twice	

**e**

$11 \times 4 =$	<input type="text"/>
Double 11 once	
Double 11 twice	

**f**

$14 \times 4 =$	<input type="text"/>
Double 14 once	
Double 14 twice	

- 5** Play this game with a partner. You will need this page each and a die to share. The aim is to be the first to place a tick above all the numbers. Double or double-double the number rolled on the die, then tick the answer in the table.

For example, Player 1 rolls a 4. They can either double it in order to tick 8 OR double-double it to tick 16. You must apply one of the strategies to the number rolled. If you can't tick a box, you miss a turn!

2	4	6	8	10	12	16	20	24

# Mental multiplication strategies – split strategy

The split strategy is when we multiply numbers in 2 parts.

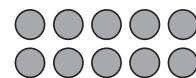
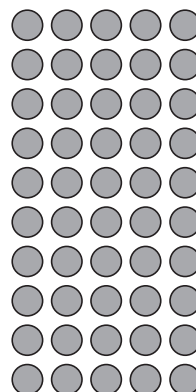
Let's use the split strategy for  $12 \times 5$ .

Split 12 into 10 and 2. Next multiply each part by 5, then add:

What is  $12 \times 5$ ?

$$10 \times 5 = 50$$

$$2 \times 5 = 10$$



$$50 + 10 = 60$$

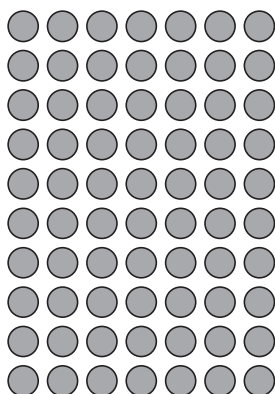
$$\text{So, } 12 \times 5 = 60$$

**1** Try the split strategy with these. Use the arrays if you get stuck.

a What is  $12 \times 7$ ?

$$10 \times \square = \square$$

$$2 \times \square = \square$$



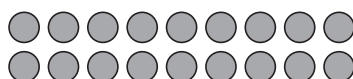
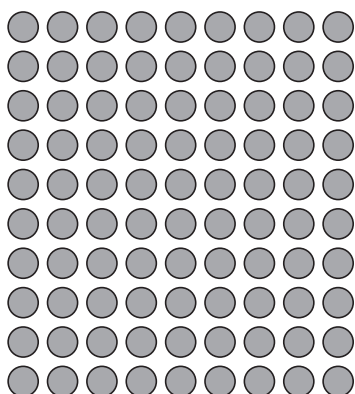
$$\square + \square = \square$$

$$\text{So, } 12 \times 7 = \square$$

b What is  $12 \times 9$ ?

$$10 \times \square = \square$$

$$2 \times \square = \square$$



$$\square + \square = \square$$

$$\text{So, } 12 \times 9 = \square$$



## Mental multiplication strategies – split strategy

**2** Practise the split strategy again, this time without an array to look at.

a What is  $12 \times 3$ ?

$$10 \times \square = \square$$

$$2 \times \square = \square$$

$$\square + \square = \square$$

$$\text{So, } 12 \times 3 = \square$$

b What is  $12 \times 6$ ?

$$10 \times \square = \square$$

$$2 \times \square = \square$$

$$\square + \square = \square$$

$$\text{So, } 12 \times 6 = \square$$

c What is  $12 \times 8$ ?

$$10 \times \square = \square$$

$$2 \times \square = \square$$

$$\square + \square = \square$$

$$\text{So, } 12 \times 8 = \square$$

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**3** Use the split strategy to multiply by 13.

13 is \_\_\_\_\_ + \_\_\_\_\_

a  $13 \times 8 = \square$

b  $13 \times 9 = \square$

c  $13 \times 7 = \square$

d  $13 \times 5 = \square$

# Mental multiplication strategies – compensation strategy

Compensation is when you get or give something back. If we need to solve a multiplication that is close to an easier calculation, we can work out the simpler one, and then adjust (by giving back a multiple) to find the answer. This is the compensation strategy.

Look at  $3 \times 19$ . 19 is close to 20, so we can multiply by the next multiple of ten which is 20. Then we build down because we have an extra group of 3.

$$3 \times 19 \longrightarrow 3 \times 20 = 60 - 3$$

So,  $3 \times 19 = 57$

- 1** When you are multiplying by a multiple of ten, look for a fact you know then put a zero on the end. These patterns show you how to do this:

**a**  $3 \times 2 = \boxed{\phantom{00}}$

$3 \times 20 = \boxed{\phantom{00}}$

**b**  $5 \times 3 = \boxed{\phantom{00}}$

$5 \times 30 = \boxed{\phantom{00}}$

**c**  $7 \times 2 = \boxed{\phantom{00}}$

$7 \times 20 = \boxed{\phantom{00}}$

**d**  $4 \times 4 = \boxed{\phantom{00}}$

$4 \times 40 = \boxed{\phantom{00}}$

- 2** The steps for the compensation strategy are set out for you here. Practise multiplying by the next multiple of ten and then build down.

**a**  $5 \times 29 \longrightarrow 5 \times 30 = \boxed{\phantom{00}} - 5$

So,  $5 \times 29 = \boxed{\phantom{00}}$

**b**  $3 \times 19 \longrightarrow 3 \times 20 = \boxed{\phantom{00}} - 3$

So,  $3 \times 19 = \boxed{\phantom{00}}$

**c**  $2 \times 39 \longrightarrow 2 \times 40 = \boxed{\phantom{00}} - 2$

So,  $2 \times 39 = \boxed{\phantom{00}}$

# Mental multiplication strategies – compensation strategy

- 3** Use the compensation strategy. This time you have to think of the next multiple of ten and what you have to build down by. The first one has been done for you.

a  $3 \times 39 \longrightarrow 3 \times \boxed{40} = \boxed{120} - \boxed{3}$

So,  $3 \times 39 = \boxed{117}$

b  $4 \times 29 \longrightarrow 4 \times \boxed{\phantom{00}} = \boxed{\phantom{00}} - \boxed{\phantom{00}}$

So,  $4 \times 29 = \boxed{\phantom{00}}$

c  $6 \times 19 \longrightarrow 6 \times \boxed{\phantom{00}} = \boxed{\phantom{00}} - \boxed{\phantom{00}}$

So,  $6 \times 19 = \boxed{\phantom{00}}$

d  $5 \times 59 \longrightarrow 5 \times \boxed{\phantom{00}} = \boxed{\phantom{00}} - \boxed{\phantom{00}}$

So,  $5 \times 59 = \boxed{\phantom{00}}$

- 4** Roll a die to make your own multiplication questions. Choose the compensation strategy for one column and the split strategy for the other.



a  $\boxed{\phantom{00}} \times 29 = \boxed{\phantom{00}}$

b  $\boxed{\phantom{00}} \times 39 = \boxed{\phantom{00}}$

c  $\boxed{\phantom{00}} \times 19 = \boxed{\phantom{00}}$

Which strategy did you use and why?

a  $\boxed{\phantom{00}} \times 13 = \boxed{\phantom{00}}$

b  $\boxed{\phantom{00}} \times 12 = \boxed{\phantom{00}}$

c  $\boxed{\phantom{00}} \times 13 = \boxed{\phantom{00}}$

Which strategy did you use and why?

# Mental multiplication strategies – word and missing number problems

**1** Can you find the missing numbers in these multiplications?

a  $5 \times \square = 40$

b  $4 \times \square = 28$

c  $\square \times 9 = 18$

d  $\square \times 7 = 40$

e  $\square \times 11 = 22$

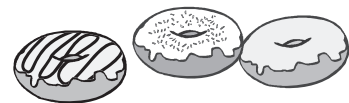
f  $20 \times \square = 100$

**2** Solve these multiplication problems. Think carefully about which strategy to use.

- a Mike loves cycling. He cycles 3 km to work and back every day.  
How far does he cycle in 1 week?

- b Ben is collecting badges, but he has only just started.  
He has 9 so far. His brother Tom has 8 times that number.  
How many does Tom have?

- c Tamsin wants to buy doughnuts for her many friends at school. The doughnuts come in packs of 4. If she buys 19 packets she will have exactly the right number.  
How many friends does she have?



- d Sarah, Xavier and Selena are going on a picnic. They all take mini packets of chocolate biscuits. There are 3 biscuits in each packet. Sarah takes 1 packet, Xavier takes double that number, and Selena takes double the number that Xavier takes.  
How many biscuits do they have altogether?




Does it make most sense to use a doubling, split or compensation strategy?

**THINK**

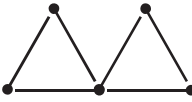
# Patterns and functions – matchstick patterns

Number patterns in tables can help us with problems like this. Mia is making this sequence of shapes with matchsticks. How can she find out how many she needs for 10 shapes?

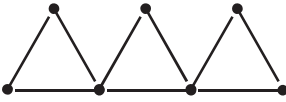
Shape 1



Shape 2



Shape 3



Shape number	1	2	3	4	5	10
Number of matchsticks	3	6	9	12	15	30

↓ × 3

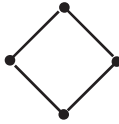
To find out how many matchsticks are needed for 10 triangles, we don't need to extend the table, we can just apply the function rule:

Number of matchsticks = Shape number × 3

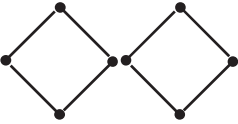
1 Complete the table for each sequence of matchstick shapes and find the number of matchsticks needed for the 10th shape.

a

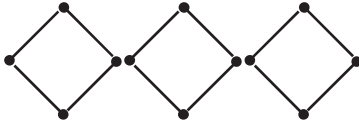
Shape 1



Shape 2



Shape 3




Shape number	1	2	3	4	5	10
Number of matchsticks	4					


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b


Shape 1



Shape 2



Shape 3



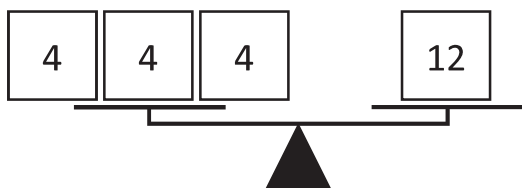
Shape number	1	2	3	4	5	10
Number of matchsticks	5					

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c Draw the fourth shape in the sequence above:

# Equations and equivalence – balanced equations using + and ×

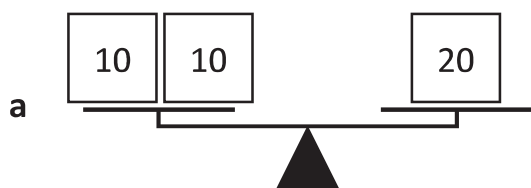
There are 2 different equations we could write for one set of balanced scales.



$$4 + 4 + 4 = 12$$

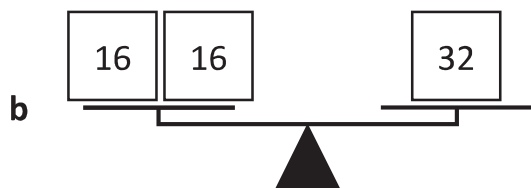
$$3 \times 4 = 12$$

1 Work out the values of the symbols in each problem.



$$\square + \square = 20$$

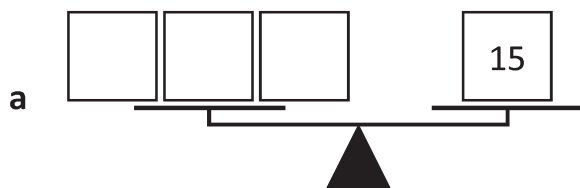
$$2 \times \square = 20$$



$$\square + \square = 32$$

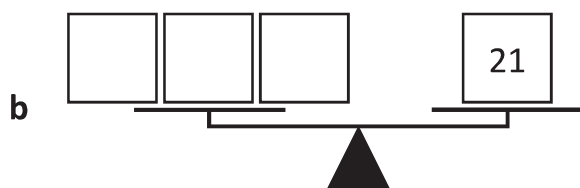
$$2 \times \square = 32$$

2 This time work out which number should go in the symbol.



$$\square + \square + \square = 15$$

$$\square \times 5 = 15$$



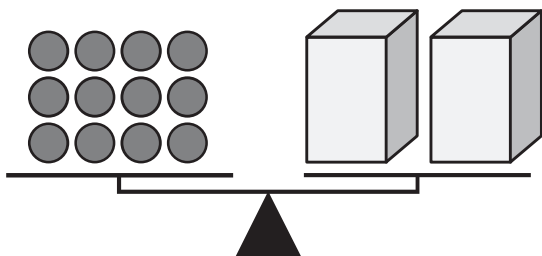
$$\square + \square + \square = 21$$

$$\square \times 7 = 21$$



# Equations and equivalence – balanced equations using + and ×

How many dots are inside each box? On one side there are 12 dots and on the other side, there are 2 boxes. Because the equation is balanced, there must be 6 in each box.

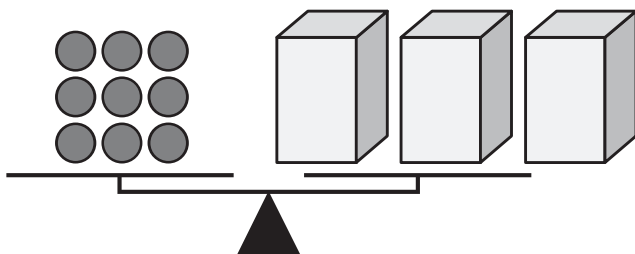


There are 2 different equations we could write for one set of balanced scales.

$$\boxed{6} + \boxed{6} = \boxed{12}$$

$$\boxed{2} \times \boxed{6} = \boxed{12}$$

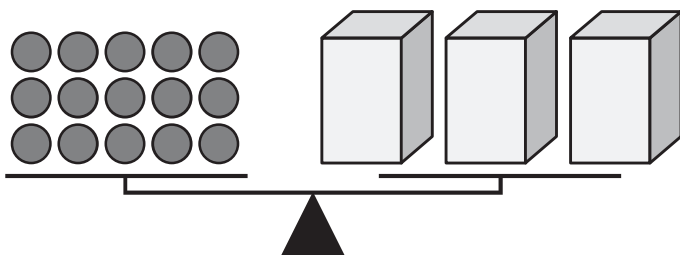
3 How many dots are inside each box?



$$\boxed{\phantom{0}} + \boxed{\phantom{0}} + \boxed{\phantom{0}} = \boxed{9}$$

$$\boxed{3} \times \boxed{\phantom{0}} = \boxed{9}$$

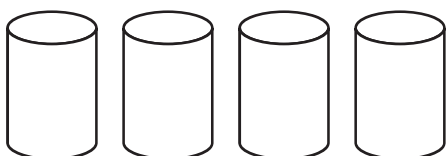
4 How many dots are inside each box?



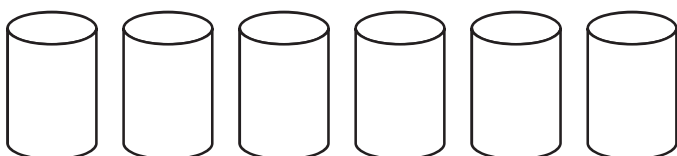
$$\boxed{\phantom{0}} + \boxed{\phantom{0}} + \boxed{\phantom{0}} = \boxed{15}$$

$$\boxed{3} \times \boxed{\phantom{0}} = \boxed{15}$$

5 If there are 16 dots in these 4 cylinders, how many dots are there in 6 cylinders? Show your working.



$$\boxed{4} \times \boxed{\phantom{0}} = \boxed{16}$$



$$\boxed{\phantom{0}} \times \boxed{\phantom{0}} = \boxed{\phantom{0}}$$



This is a game for two players. Copy this page and page 46, and then cut out all the cards.



Shuffle the cards well and lay them out face down in an array in two groups. The rectangles are the questions, the squares are the answers. Players take turns turning over one of each card. If they can make a multiplication fact, the player keeps the pair. Keep playing until there are no cards left. The winner is the player with the most matching pairs.

$4 \times 8$	$2 \times 9$	$7 \times 5$	$3 \times 3$
$6 \times 4$	$9 \times 3$	$4 \times 4$	$5 \times 8$
$4 \times 5$	$8 \times 8$	$3 \times 5$	$8 \times 9$
$8 \times 10$	$3 \times 4$	$4 \times 7$	$9 \times 5$
$5 \times 5$	$8 \times 6$	$7 \times 2$	$5 \times 10$



$3 \times 7$	$3 \times 10$
--------------	---------------

$4 \times 9$	$3 \times 11$	$8 \times 7$
--------------	---------------	--------------

$= 32$	$= 18$	$= 35$	$= 24$	$= 27$
--------	--------	--------	--------	--------

$= 30$	$= 20$	$= 21$	$= 15$	$= 12$
--------	--------	--------	--------	--------

$= 80$	$= 28$	$= 25$	$= 48$	$= 14$
--------	--------	--------	--------	--------

$= 72$	$= 56$	$= 40$	$= 45$	$= 33$
--------	--------	--------	--------	--------

$= 9$	$= 50$	$= 16$	$= 36$	$= 64$
-------	--------	--------	--------	--------



Getting ready



This is a game for four players. Each player needs a copy of this page and 5 counters. The group needs 2 dice. Make extra copies of this page so you can play again.



copy



What to do



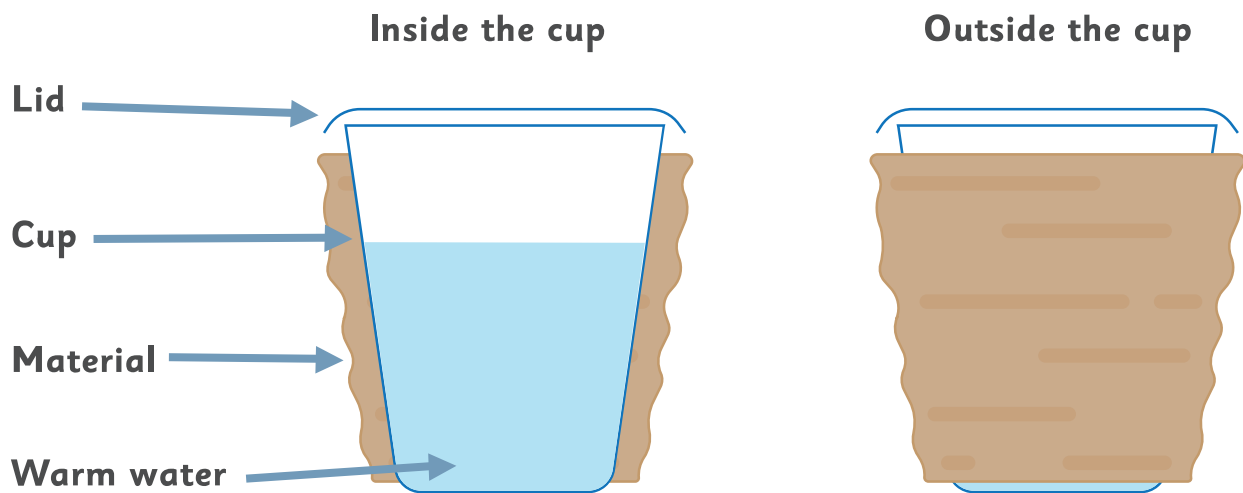
Choose one player to be the caller. The other players fill their grid with numbers from this list: 1, 2, 3, 4, 5, 6, 8, 9, 10, 12, 15, 16, 18, 20, 24, 25, 30 and 36.

The caller rolls the dice and calls out a times table fact based on the numbers rolled. For example, if they roll a 6 and a 5, they would say  $6 \times 5$ . If a player has 30 in their grid, they place a counter on the number. The winner is the first player to get rid of all their counters.


# STUDENT SHEET 4a: INVESTIGATING INSULATING MATERIALS

## Instructions

You will be setting up your experiment like the diagram below.



1. Fill your cups with warm water.
2. Measure the temperatures and record them in the table below.
3. Quickly and carefully put the lids on your cups and wrap each one in a different material.
4. Put a sticky label with your names on top.
5. Place the cups in a cool environment.
6. Leave them for 15 minutes, use the stopwatch to time this.
7. Collect your containers.
8. Unwrap them carefully.
9. Measure the temperatures again and record them in the table below.
10. Work out the difference between the temperatures before and after the experiment.

## Table

Material	Temperature (°C)		Difference
	Before	After	



## STUDENT SHEET 4a: INVESTIGATING INSULATING MATERIALS (CONTINUED)

### Discussion questions

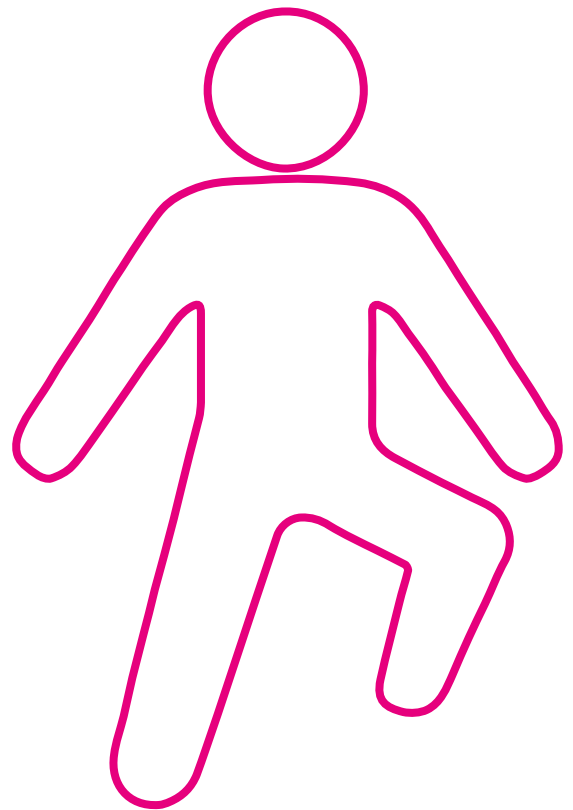
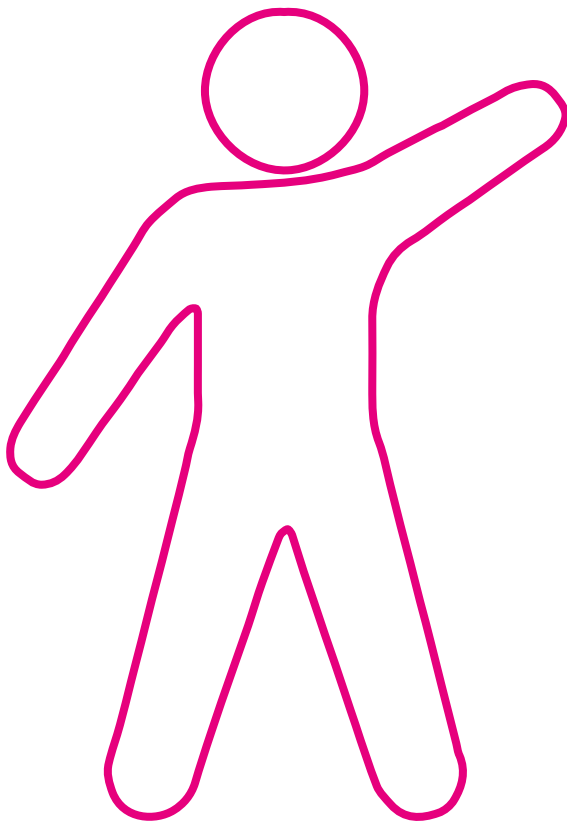
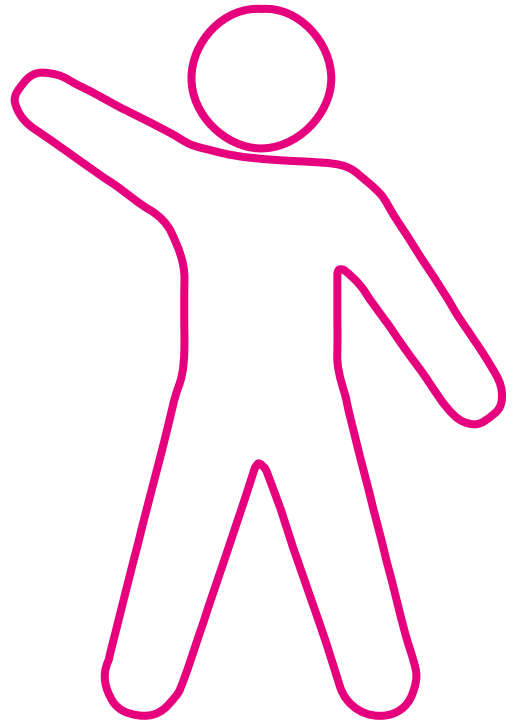
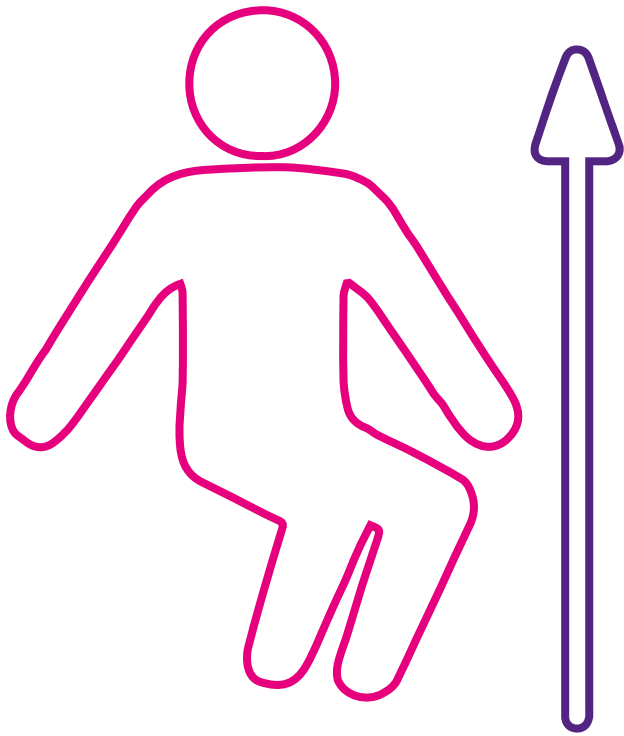
1. Which cup has the biggest difference in temperature?
2. Which cup has the smallest difference in temperature?
3. Which cup lost the least heat?
4. Which material is the best insulator?
5. How can you tell?
6. Do the results support your prediction?
7. Which material will you recommend to Tyler to use?

### Presentation

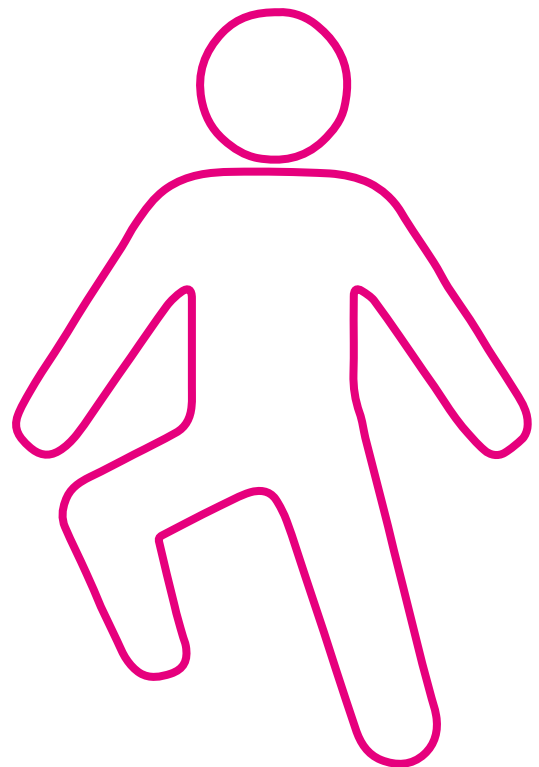
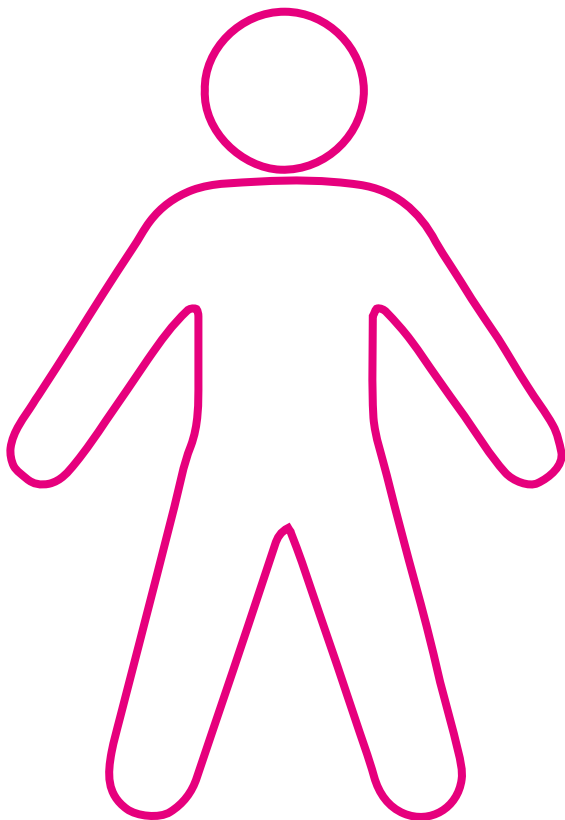
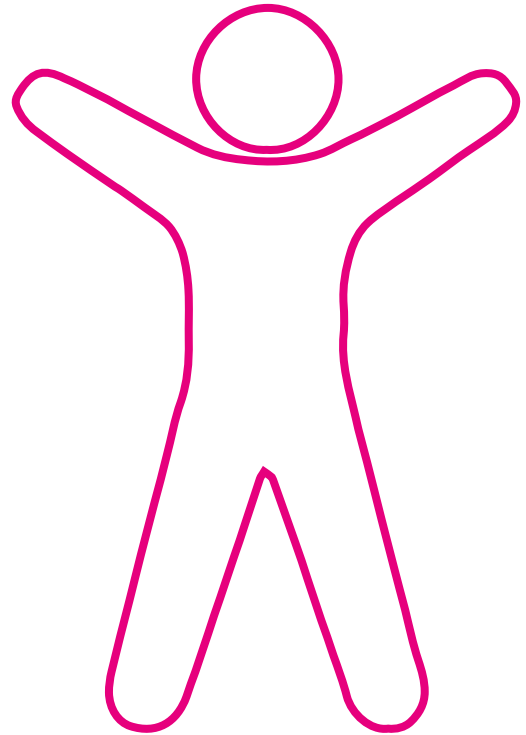
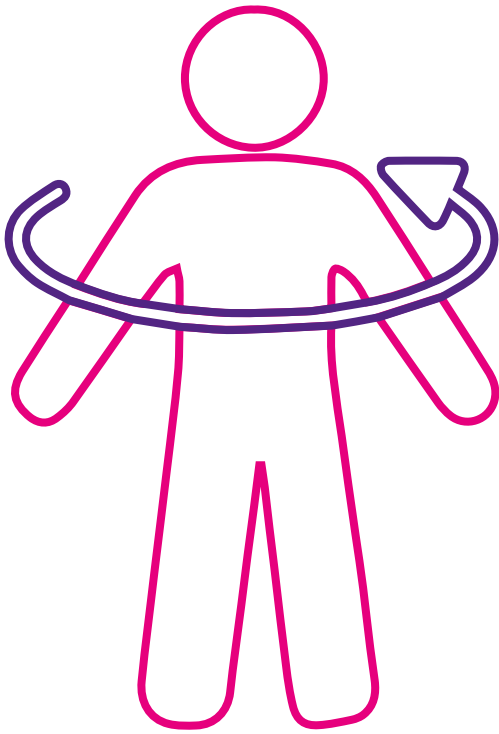
1. You are going to make a short, 2-minute presentation to recommend a material to Tyler.
2. Use Student Sheet 4b or 4c to help you make a scientific poster to use in your presentation.
3. Use the success criteria on the board to help.



# Dance move cards



# Dance move cards



# Dance move extension cards

**Repeat x2**



**If \_\_\_\_\_**  
**then do**

**Repeat x3**

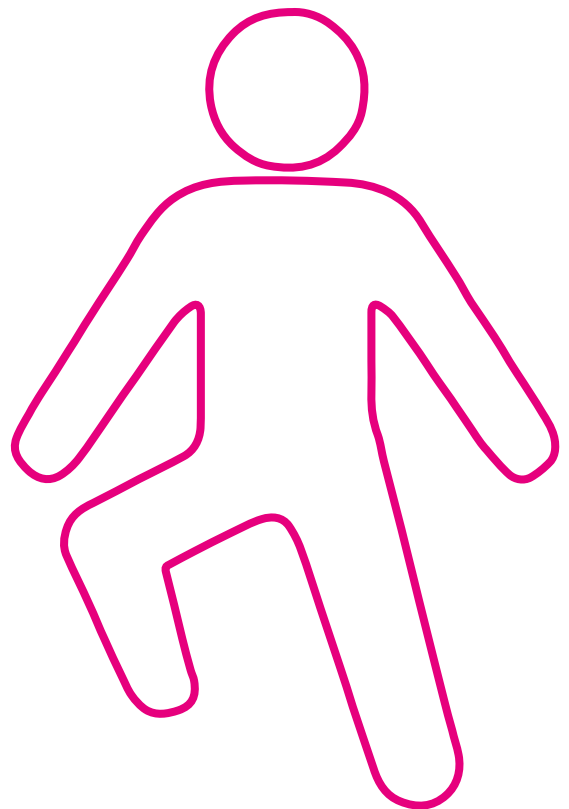
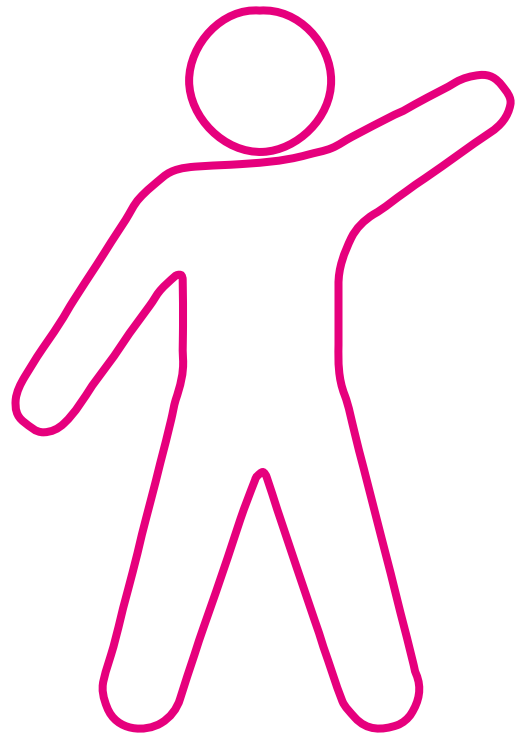
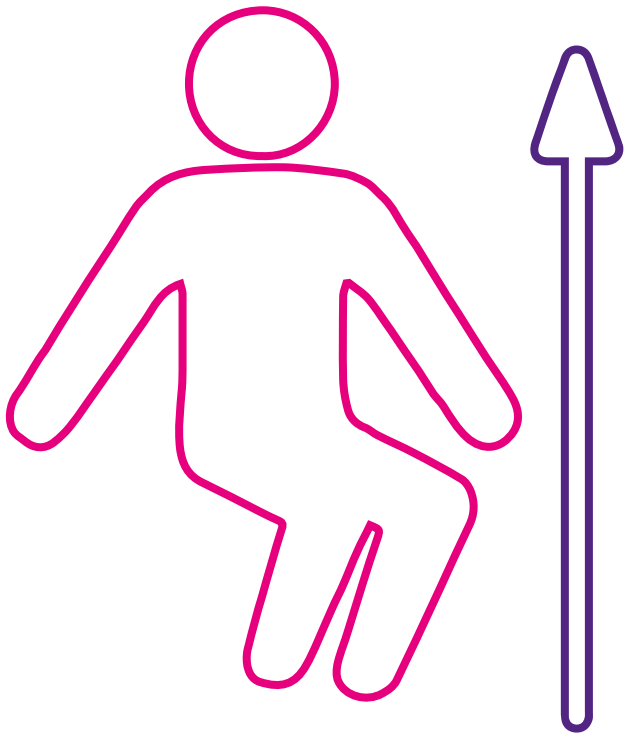


**else**  
**do**

**Loop**



# Small dance move cards



# Small dance move cards

**Repeat x2**



**Repeat x2**



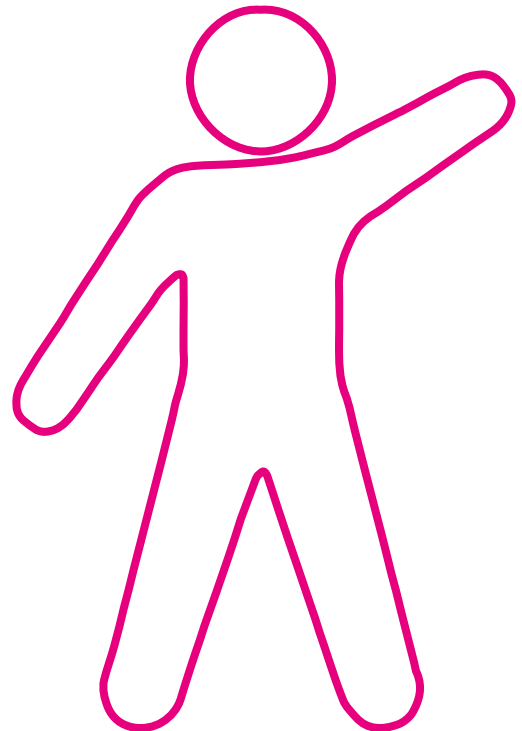
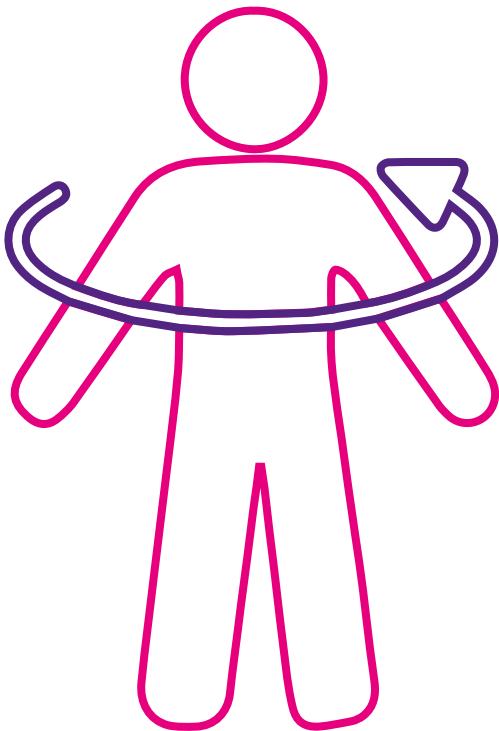
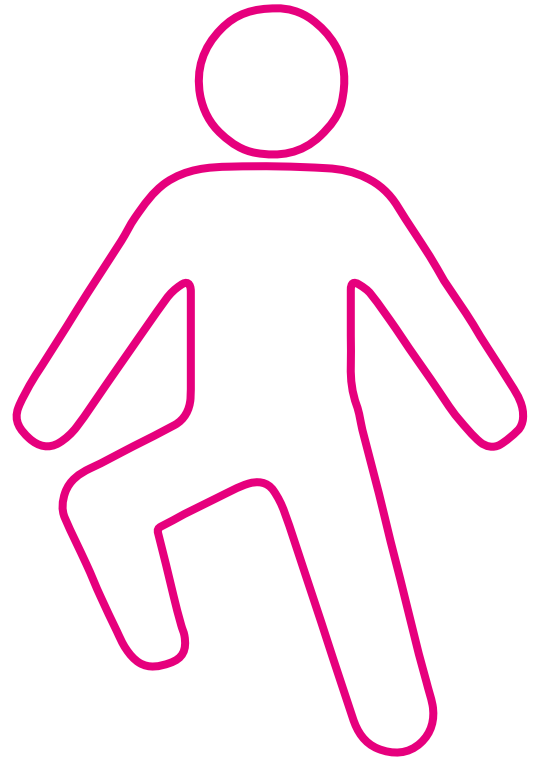
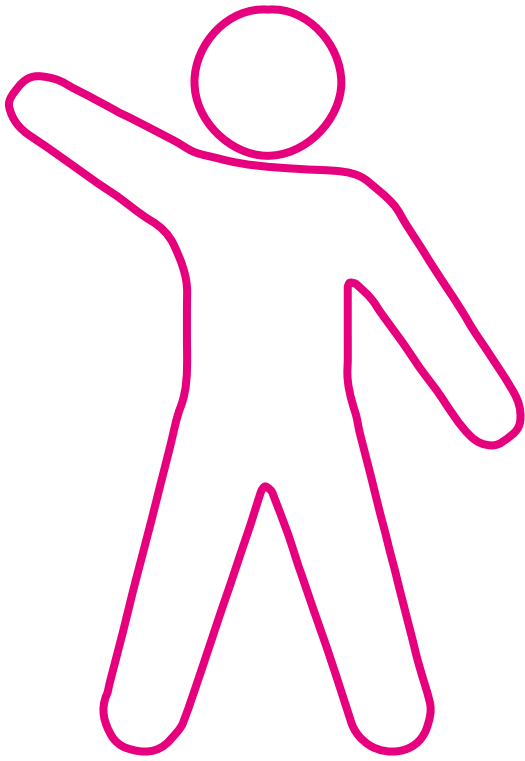
**Repeat x3**



**Repeat x3**



# Small dance move cards





## Take 5: Ideas for Independent/Home Learning

### Varjak Paw by S.F. Said, illustrated by Dave McKean (Corgi)

#### 1. Explore it

Read this story opening. You might want to hear it read aloud as well as reading it for yourself.

#### Chapter One

The Elder Paw was telling a story.

It was a Jalal tale, one of the best. Varjak loved to hear his grandfather's tales of their famous ancestor: how Jalal fought the fiercest warrior cats, how he was the mightiest hunter, how he came out of Mesopotamia and travelled to the ends of the earth, further than any cat had been before.

But today, the Elder Paw's tale just made Varjak restless. So what if Jalal had such exciting adventures? Varjak never would. Jalal had ended his days in the Contessa's house. His family of Mesopotamian Blues had stayed here ever since.

The old place must have been full of light and life in Jalal's time, generations ago – but now it was full of dust and musty smells. The windows were always closed, the doors locked. There was a garden, but it was surrounded by a high stone wall. Jalal was the last to cross it. In all the years since then, no one had ever left the Contessa's house.

Now, no one except Varjak was even listening to the tale of Jalal's adventures. Father, Mother and Aunt Juni were dozing in the late afternoon light that trickled through the thick green windows. His big brother Julius was flexing his muscles; his cousin Jasmine was fiddling with her collar. His litter brothers Jay, Jethro and Jerome were playing one of those kittenish games that Varjak could never see the point of, and wasn't allowed to join in anyway.

No one was looking at him. This was his chance. He'd been in the garden before, but the family didn't like it out there, and never let him stay very long.

Talk about how this story opening makes you feel and what you like or dislike about it. Does it remind you of anything you know in stories or real life? How? Think about how it is written. What parts of this really stick in your mind? Which words and phrases do you like the best? What do you like about them? Do they look or sound interesting? Do they help you make a picture in your mind? What do other people think?

#### 2. Illustrate it

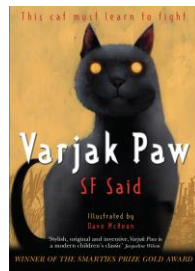
After you have read it a few times, take a pen or pencil and a bit of scrap paper. You can use the back of an old envelope or cereal packet; whatever is to hand. Draw what you see in your imagination. It can be shapes or shading - anything that captures the place and the mood of this story opening. Maybe other people in your family want to draw what they imagine as well. Remember, everyone has their own ideas and imagines things their own way. This is a good thing!

To get started, ask yourself: *Where does this story begin? What happens? How do you know? How does it make me feel? How can I show this in a drawing?*

Re-read the opening and write some words and phrases that have helped you make your picture. Share what you have drawn with someone else: Why have you chosen to draw it this way? Which words and phrases helped you make a picture?

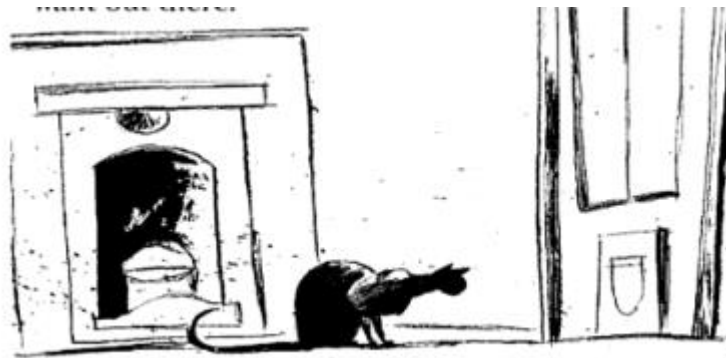
#### 3. Talk about it

Look at the front cover of the book.



How do you think Varjak Paw is feeling? What might he be thinking? How do you know? What might he be looking at? What might have happened just before this image? What might be about to happen? What could *'This cat must learn to fight.'* mean? What does the cover make you think the story will be about?

#### 4. Imagine it



Look at this picture from inside the first chapter. What further detail does the picture give you about Varjak's life? Why do you think Varjak is shown staring at the cat flap? How do you think he feels in this moment? What do you imagine is outside the cat flap?

Can you imagine what it might be like for a cat to be stuck inside all the time? How does it feel for you when you can't get outside? What do you do to keep yourself busy and entertained when you are stuck inside? How do these things help you?

#### 5. Create it

Can you imagine what would happen if Varjak took the risk and left the house? What do you think would happen?

Draw and write your story ideas, trying out different ideas. Remember to use stories you already know and like for ideas. You could even publish your story in a handmade book by folding a piece of paper or on the computer, ready to share it with your teacher or your friends and family.

## STUDENT SHEET 4d: BLUBBER GLOVES

Imagine what it would be like to live in a really cold place like the Arctic? Brrrr! How would you keep yourself warm? There are animals like walrus and polar bears that live in places like this. They can't wear warm clothes so they grow a thick layer of fat, or blubber, to keep out the cold.

### Your mission

Pretend to be an animal in the Arctic and find out whether a layer of fat really can keep out the cold. There are two ways of doing the experiment. The first might be a bit messy, so make sure you get a grown up to help.



### What you'll need

- 1 large container
- Lots of ice
- Stopwatch
- Gaffer or parcel tape (method 2 only)
- Fat, such as margarine or animal equivalent suet, butter, lard
- Two freezer / self-seal bags or over large rubber gloves (method 2 only)

### The messy way

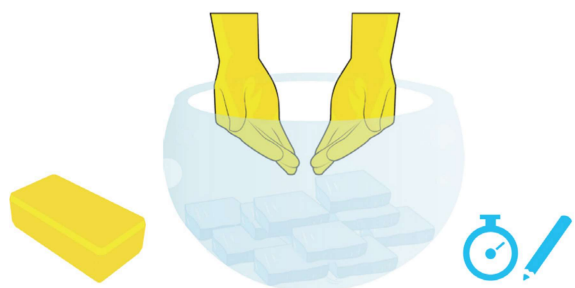
1. Fill a large container with lots of ice and water.
2. Put one hand in the cold water and time how long you can keep it there before the cold becomes unbearable.
3. Make a note of the time you lasted.
4. Now smear your hand with lots of fat and repeat the experiment, timing how long you can keep your fatty hand in the water.
5. Compare the two times.



### The clean way

Follow steps 1 & 2 in the first method. Then...

3. Fill one of the bags or gloves two thirds full with fat.
4. Put one of your hands in the other bag or glove then push it into the fat filled-bag or glove, Hey presto! A blubber glove.
5. Roll the ends of the bags or gloves together and seal with tape to stop any fat escaping.
6. Put your blubber glove in your freezing cold water and compare times as before.



**What did you discover on your fat-finding mission?**

Watch the lesson on you tube. <https://youtu.be/bO7SPaYfZl0>



## Materiales

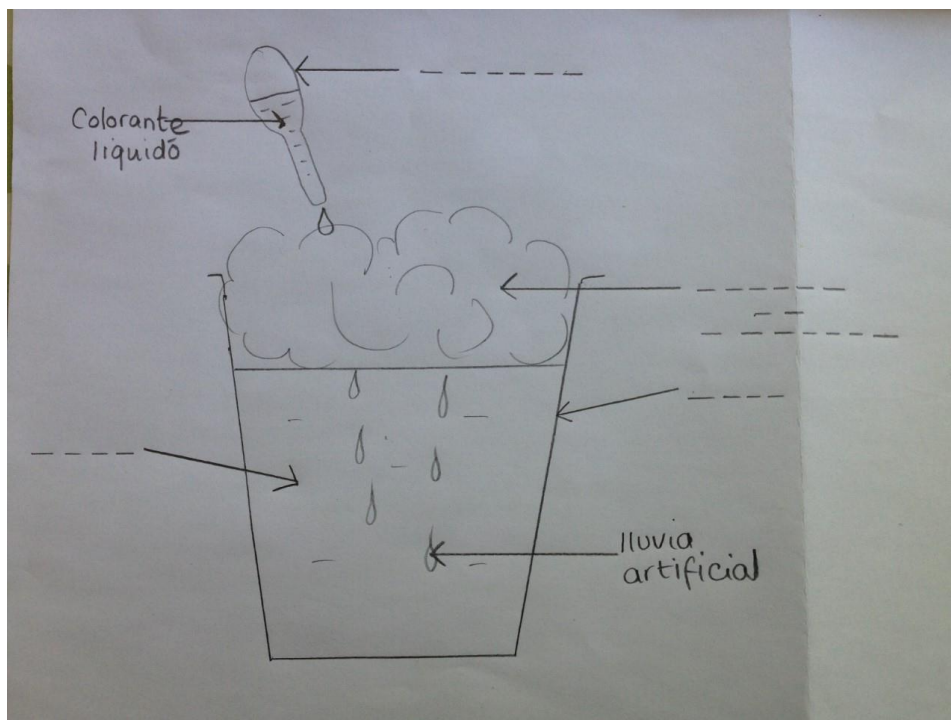
Necesitarás los siguientes materiales:

- ✓ Espuma de afeitar o espuma para el cabello
- ✓ Vaso
- ✓ Agua
- ✓ Colorante alimentario o acuarela líquida
- ✓ Gotero, pipeta o cuchara pequeña

## Procedimiento

Llena  $\frac{3}{4}$  de tu vaso o frasco con agua del grifo. Usa la espuma para crear una nube en la superficie del agua, espera un minuto a que la espuma se asiente un poco. A continuación, agrega varias gotas del colorante de alimentos encima de la nube de espuma. A medida que la nube se hace más pesada por el colorante, observarás que el colorante cae al agua creando un efecto similar a la lluvia.

Label the diagram using words from above





La Cancion del Tiempo, por Señor Jordan



Cuando  
**hace sol,  
hace sol,**  
necesito usar  
bloqueador.



Cuando  
**hace calor,  
hace calor,**  
¡quiero  
más helado  
por favor!



Cuando  
**hace frío,**  
me pongo  
los guantes  
y un abrigo.

x2



Cuando  
**hace fresco,**  
cerca del fuego  
permanezco.



Cuando **hace viento,**  
**hace viento,**  
normalmente  
camino  
más  
lento.



Cuando **está despejado,**  
**está despejado**  
  
**hace sol y no** está nublado.

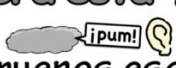

Cuando  
**está  
lloviendo,**  
quiero estar  
en mi cama  
durmiendo.



x2

Cuando  
**está  
nevando,**  
chocolate  
caliente  
estoy  
tomando.



Cuando  
**afuera está feo,**  
**afuera está feo,**  
  
los truenos escucho  
  
y los rayos veo.



Cuando  
**está bonito,**  
**está bonito**  
**afuera,**  
¡hacer un picnic  
yo quisiera!



Cuando  
el clima  
no sé,  
necesito preguntar:  
"¿Qué tiempo hace?"



x2

Cuando  
el clima  
no sé,  
necesito preguntar:  
"¿Qué tiempo hace?"

