



Year 2 Summer Learning Grid



In this pack, you will find some suggested activities to keep you busy during the summer holidays and to help you prepare for Year 3.

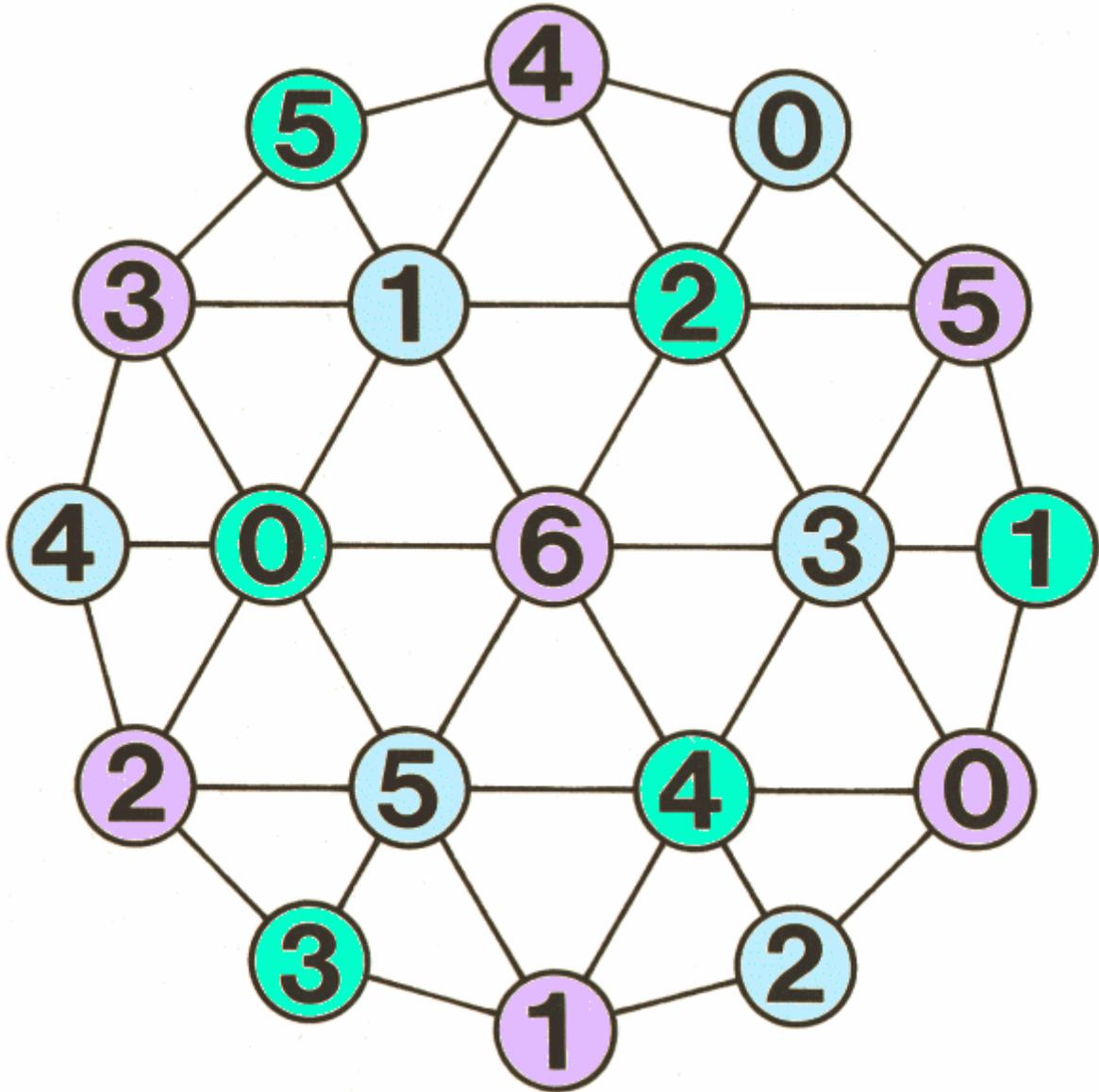
Maths	Reading	Writing	Wider Curriculum	Creative	Physical
<p>Recapping this year's maths learning over the summer holidays will be great in helping you prepare for Year 3. You might like to practise: recognising the tens and ones in a 2-digit number, addition, subtraction, multiplying by 2, 5 or 10, ten more and ten less, number bonds, doubling, halving, sharing by 2, 5 or 10, shapes, money, time, measuring and weighing. You will find activities related to some of these areas below.</p> <p>Addition - Use this number generator here. Select the minimum as 10 and the maximum as 99. Create two numbers and add them together. - Totality: Watch the video here to learn how to play the game, choosing a number in the 20s or 30s. The board is in your pack.</p> <p>Addition and subtraction - Pass the peas, please.</p> <p>Number bonds - Number bonds to 10 robot sheet - Use this number generator here. Set the minimum number to 0 and the maximum to 99. Find out what the number bond will be to get the number to 100. E.g. if I had 36, I would need 64 to get to 100.</p> <p>Measuring and weighing - If you help with any baking or cooking over summer, you are going to be doing Maths! Weighing out the ingredients is so important! - Using a tape measure or a ruler, measure the length of each of the lines in your pack in cm.</p>	<p>Aim to read for 20 minutes every day, with an adult when you can.</p> <p>Ebooks links: MyOn – click here Collins – click here Oxford – click here</p> <p>Remember you can also get eBooks for your phone or tablet on the Kent library app, Libby. Lots of great children's books have been added over the past few months.</p> <p>When you are reading, use the question cards below to help you think about the story in more depth.</p> <p>Keep practising reading and writing all of your tricky words too. (You will find a list of all tricky words to practise below.)</p>	<p>Write an 'all about me' letter for your new teacher, just like the one they wrote to you. You might like to include your name, age, information about your family and some of your favourite things (colours, foods, toys, places etc.).</p> <p>Write a postcard to someone you care about telling them about your favourite day out during the holidays. You might like to buy a postcard from a gift shop, or draw your own.</p> <p>Go somewhere you can connect with nature, such as the garden, a forest or a beach. Write down all the sounds you hear. Then, when you get home, create a sound poem.</p>	<p>Science: Take your pick from the science experiments detailed below, or complete all 5!</p> <p>Geography and Computing: Research a new place you've never been before. It may be somewhere you see on the news, or you could use this list of countries to help you decide. Write a mini report about what you find out.</p> <p>PSHE: Talk to an adult at home about how you're feeling about starting Year 3. If you do this on a few occasions, you might notice that you feel different emotions each time: this is fine! However you're feeling is absolutely normal and it's important that you feel able to talk about it. You could use the Blob Tree in your pack to help you identify how you feel. You might like to complete the 'Old class, new class' sheet below.</p> <p>Other: Complete the five senses scavenger hunt below.</p> <p>Make sure you get plenty of fresh air this summer: see how many of the summer outdoor learning activities below you can complete.</p>	<p>Make a summer holiday scrap book: stick in photos and mementos, then write a short sentence or two to explain what was happening in the photo, or where the memento was from and why it is special to you.</p> <p>Painting: Painting with a paint brush isn't the only type of painting we can do. Have a go at some of the following types of painting:</p> <ul style="list-style-type: none"> * Bubble painting (instructions below) * Painting with puffy paint (Mix equal parts flour, salt and water. Divide into separate containers and add a couple of drops of food colouring to each container, creating different colours. Use a cotton bud or lolly stick to spread the paint onto paper, to create a picture.) * You could also use other things as a paintbrush. Go outside and collect lots of different natural materials. Experiment with them to see if you can find anything that works well. 	<p>Lockdown didn't stop us from staying active. Let's make sure we keep this up over the summer!</p> <p>Hopefully we'll have some nice weather during the holidays and be able to spend lots of time outside.</p> <p>Cricket is a great, fun summer sport for all the family. Click here for some cricket activities you can try at home.</p> <p>If you enjoy the cricket activities, you might also like to give some tennis activities a try. You can find some here.</p> <p>For a tennis-themed guided dance, search 'Hit the ball y'all' on GoNoodle.</p>

<p>- Using a tape measure or a ruler, measure the length or height of different things around your house. Think carefully about whether you would use millimetres, centimetres or metres.</p> <p>Doubling and Halving - Doubling dog and Halving hippo sheets.</p> <p>Telling the time - Beat the computer! Read the instructions for this game and see if you can beat the computer! Tell someone at home what each time says.</p> <p>Shape and space - have a go at creating the tangram images here. You will need to print out the resources in your pack.</p> <p>Remember that all of the previous home learning grids are still available on the school website, meaning you are able to go back and recap any of the maths activities and arithmetic that have previously been provided for home.</p>	<p>At the start of your summer holiday, write a couple of predictions about what you think you will do over the break. Remember, predictions often start by answering a question.</p> <p>Write a book review for your favourite book. Remember to include the title of the book, the author, what happens in the book and why it is your favourite.</p>	<p>Invent a piece of writing. You could choose to write fiction or non-fiction. It can be about anything you like. There are some pictures in your pack to get your creative juices flowing, but you don't have to use these.</p>	<p>Life skills: here are some great life skills you could continue to practise over the summer to make you even more independent.</p> <p>Tie your shoe laces: here is a video to show you.</p> <p>Make your own packed lunch.</p> <p>Setting the table</p> <p>Feeding pets</p> <p>Wash the dishes</p> <p>Make your bed</p> <p>Doing buttons up on tops</p> <p>Practice typing (Dance Mat Typing is very useful)</p> <p>Basic first aid (Red Cross)</p>	<p>Make some summer crafts. There are some great ideas here, but you could also find your own. I particularly love the jellyfish suncatcher, the fruit fans and the rainbow bubble snake!</p> <p>Create a nature photo frame (instructions below).</p>	<p>Keep up your Cosmic Kids Yoga over the summer. You might like to try some of the longer adventures, such as Frozen, Trolls or Star Wars, all of which can be found on YouTube.</p>
--	---	---	--	--	---



Maths Activities

Totality



Pass the Peas, Please

This is a game for two or more players.

You will need:

- A plastic cup (or you could just use your hands)
- Some dried peas or counters (two for each player). If you don't have these at home, you could use small rocks, pieces of Lego or even a couple of dice.
- A game board- if you can't print this one, you could create your own.
- Paper and a pencil each for calculating and recording scores

To play:

You need a copy of the game board below (two players should use the same board)

All players begin by writing 50 on their score sheets.

The first player puts two dried peas into a plastic cup.

They toss the peas onto the game board, and add the two numbers that the peas land on.

They then take this sum away from 50 and write down the answer on their score sheet.

The next player takes a turn.

After the first turn, the players start with the new number written on their score sheet and take the sum of the numbers away from that, rather than from 50.

To win:

The first player to reach zero wins.

Challenge: What if...?

Once you've played a few times, try changing the game!

Can you change the number of peas?

Can you change the starting number?

What could you do with the two numbers instead of adding them?

How could you change the board?

What happens when you change the rules?

5

8

0

2

4

6

1

7

3

7

8

4

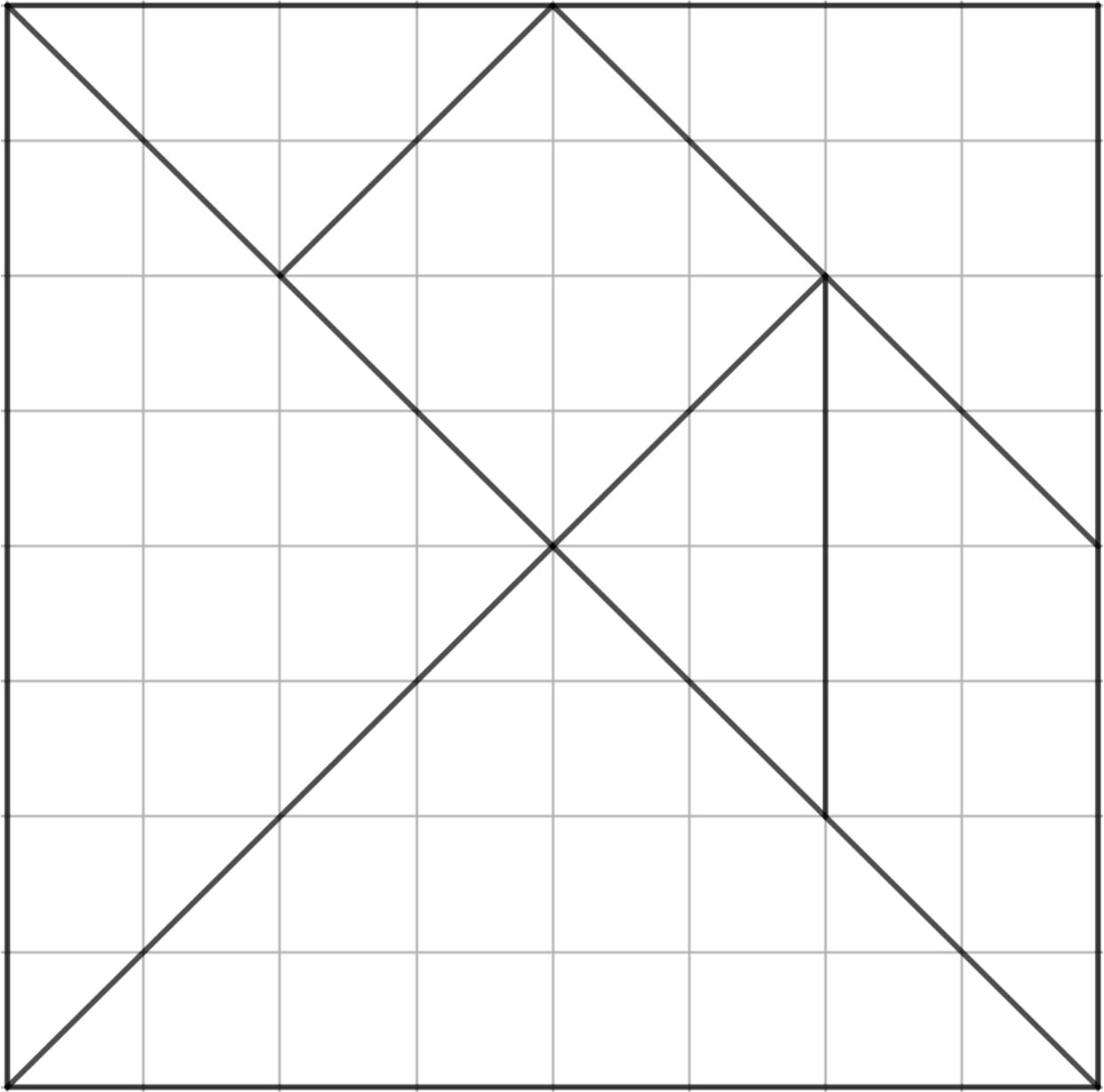
9

1

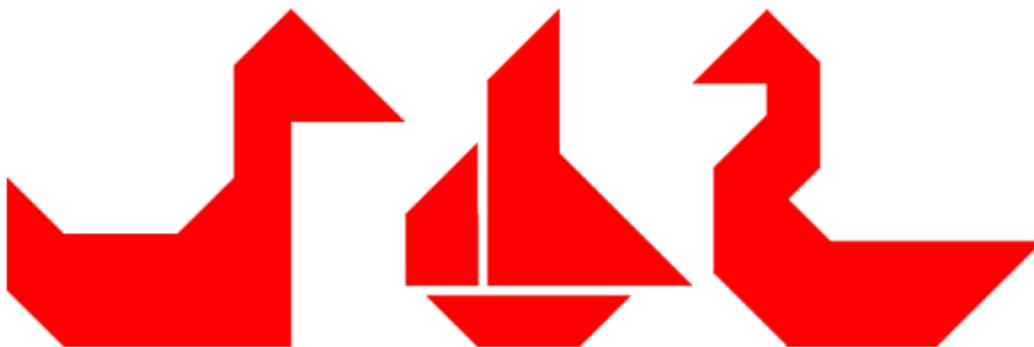
5

2

Tangram Pictures



Can you make each of these pictures using your seven pieces?

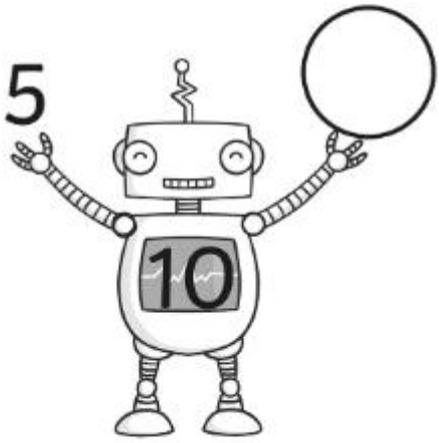
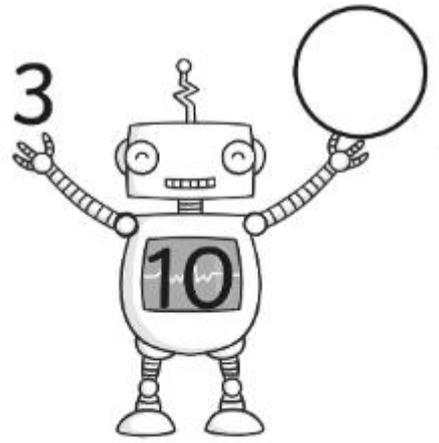
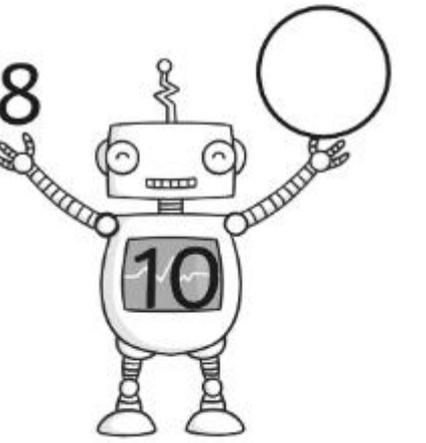
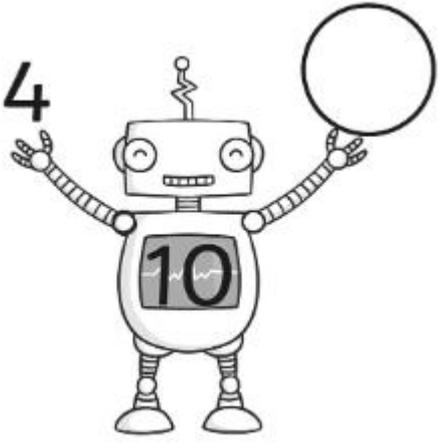
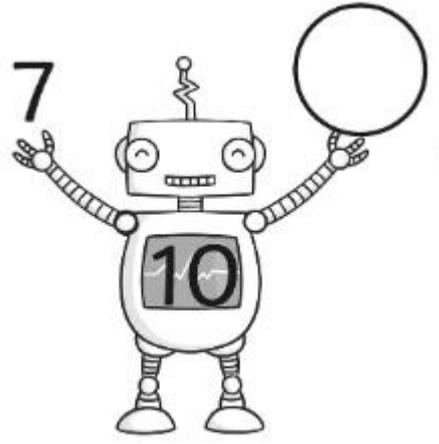
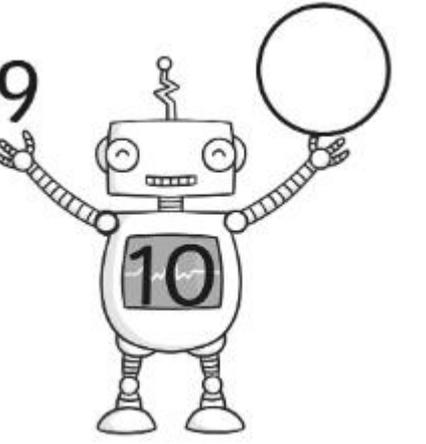
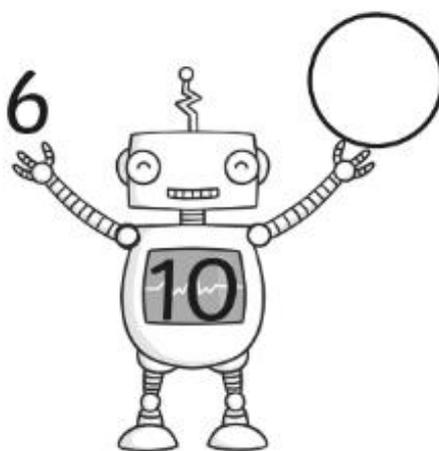
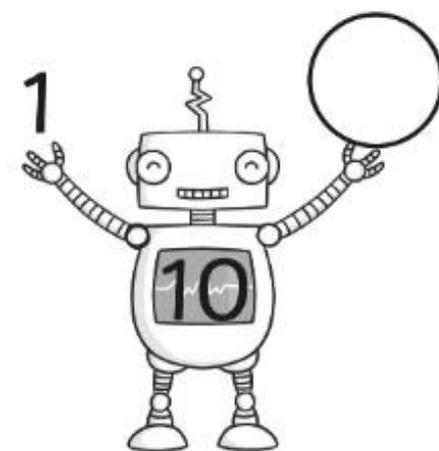
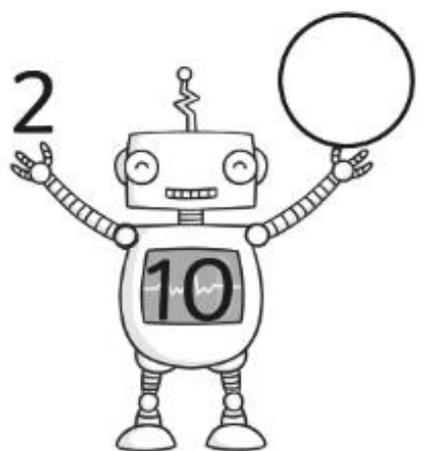


You can try some more tangram puzzles in the [World of Tan](#) problems. There are puzzles using a different set of tangram shapes in the problem [Square Tangram](#).

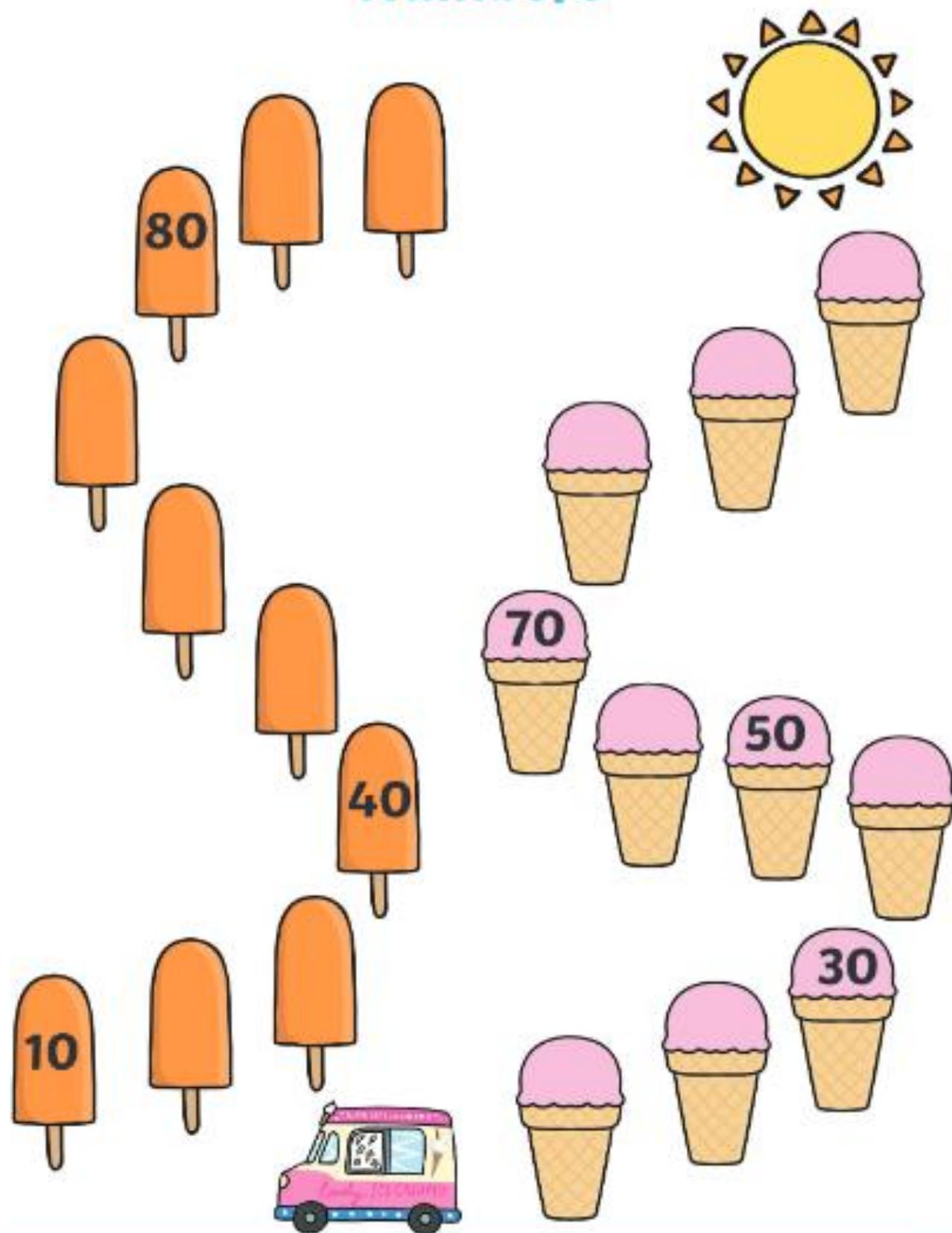
Or why not try designing some Tangram pictures of your own?

Number Bonds to 10

Can you find the missing number bond to make 10 in the robot's tummy?

5		3		8	
4		7		9	
6		1		2	

Summer Counting in 10s Missing Numbers



Measuring

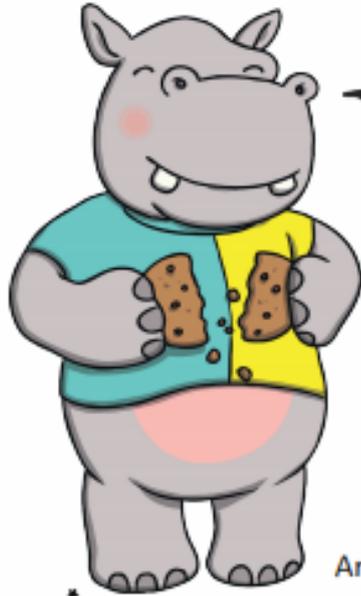
Using a tape measure or a ruler, measure the length of each of these lines in cm.



Doubling Dog and Halving Hippo

Doubling Dog and Halving Hippo

I can use doubles and halves as inverses.



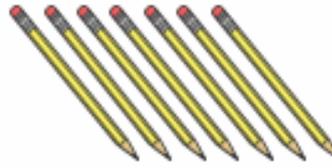
I've just eaten half of everything. How many did I start with?



Answer _____



Answer _____

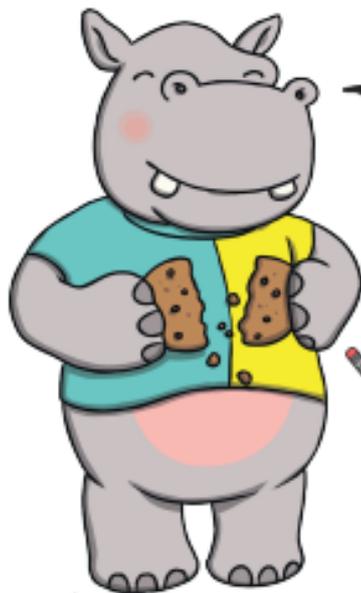


Answer _____

Answer _____

Doubling Dog and Halving Hippo

I can use doubles and halves as inverses.



I am about to eat. How many will I eat?



Answer _____



Answer _____



Answer _____



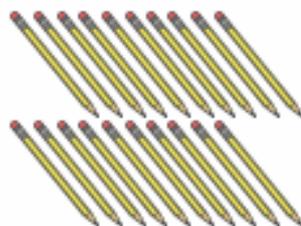
Answer _____

Doubling Dog and Halving Hippo

I can use doubles and halves as inverses.



Answer _____



Answer _____

Answer _____

Answer _____

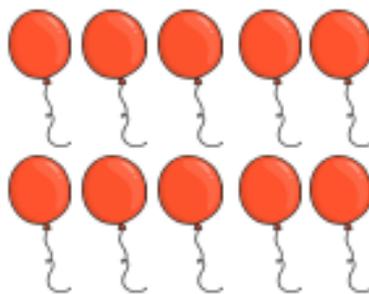
twinkl

planit

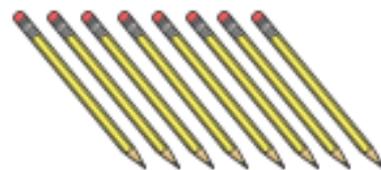
Mathematics | Year 2 | Number and Algebra | Number and Place Value | Doubles and Halves | Lesson 3 of 3: Doubles and Halves

Doubling Dog and Halving Hippo

I can use doubles and halves as inverses.



Answer _____



Answer _____

Answer _____

Answer _____



twinkl

planit

Mathematics | Year 2 | Number and Algebra | Number and Place Value | Doubles and Halves | Lesson 3 of 3: Doubles and Halves



Reading Activities

Phase 2 to 5 Tricky Words

Phase 2

I
no
the
to
go
into

Phase 3

he
she
we
me
be
you
are
her
was
all
they
my

Phase 4

said
have
like
so
do
some
come
little
one
were
there
what
when
out

Phase 5

oh
Mrs
people
their
called
Mr
looked
asked
could

Year 2 Common Exception Words

after
again
any
bath
beautiful
because
behind
both
break
busy
child
children
Christmas

class
climb
clothes
could
cold
door
even
every
everybody
eye
fast
father
find

floor
gold
grass
great
half
hold
hour
improve
kind
last
many
mind
money

most
move
Mr
Mrs
old
only
parents
pass
past
path
people
plant
poor

pretty
prove
should
steak
sugar
sure
told
water
whole
who
wild
would

Reading Question Cards

Looking at the cover, what do you think this story is about? ★★



How did the story start? ★★



What happened at the end of the story? ★★



What happened in the middle part of the story? ★★



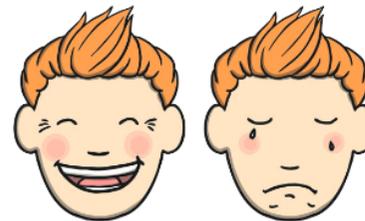
How does _____ (character) feel at the end? ★★



Which part of the story did you like the most? Why? ★★★



How did this story make you feel? ★★★

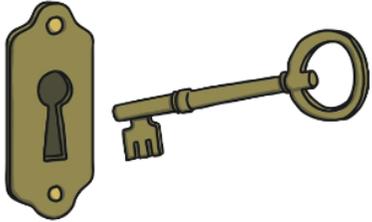


What was the happiest part of the story? ★★★



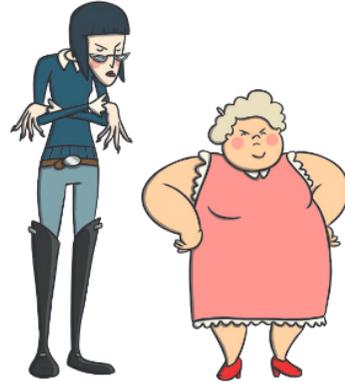
★★★

What is the moral to this story?



★★★

What type of characters were there in the story?



★★★

Has anything like this ever happened to you? What was it?



★★★

If you were _____ (character) what would you do differently?



★★★

If you could make a new ending what would it be?



★★★

Find an interesting description in the story. Who or what does it describe and why is it interesting?





Writing Activities

Picture Stimuli for stories

Suspense Story

Quest Story

Portal story

Adventure story

Recount

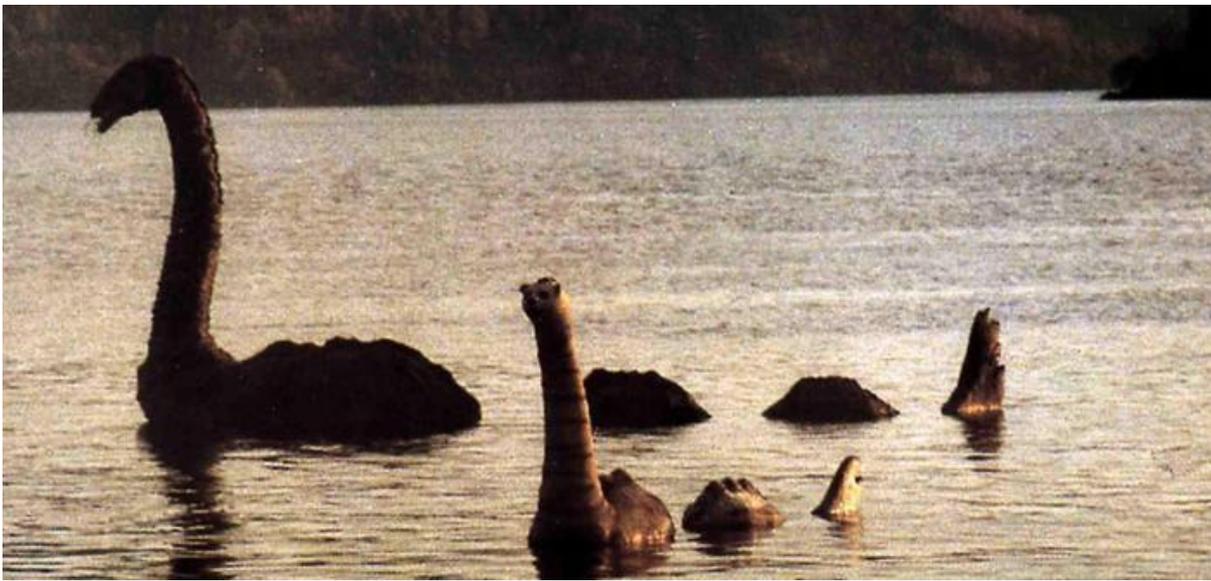
Non-chronological report

Instructions











Wider Curriculum

Science experiments

Fireworks in a Glass

You Will Need

- Warm Water
- Oil*
- A Tall Glass
- Food Colouring



* Please dispose of oil safely and responsibly.

This is a very cool, simple and fun experiment, and also completely safe, just don't drink the water!

Method

- 1 Fill the tall glass with warm water.
- 2 Pour a small amount of oil into another container and add a few drops of food colouring.
- 3 Give it a good stir, if it doesn't mix, add a bit of water.
- 4 Pour the food colouring and oil mixture into the warm water and watch the fireworks!

The Science Bit

Oil and water don't mix. Also oil is less dense than water (meaning there is less of it in the same volume) and therefore floats on top of water in a nice layer. The food colouring we used was water based and therefore does not mix with the oil, instead it sinks through the oil into the water below. Since the addition of the colouring makes the food colouring heavier than the water, it sinks to the bottom leaving trails (resembling fireworks) as some of the colour diffuses into the water.

Dissolving

Which solids dissolve in water?

You Will Need

- Water (hot and cold)
- Transparent Containers
- Substances to try and dissolve; sand, sugar, salt, coffee etc



Method

- 1 Add a teaspoon of whichever solid you are testing to a glass of cold water and a glass of hot water, stir and observe the difference.
- 2 Look to see if the solid dissolves in the hot water and cold water and if one is better than the other.
- 3 Can you design a chart to record your observation?

The Science Bit

Things like salt, sugar and coffee dissolve in water. They are soluble. They usually dissolve faster and better in hot water. Pepper and sand are insoluble, they will not dissolve even in hot water.

Rain Cloud in a Jar

You will need:



Shaving cream



A clear large jar



Water



Blue food colouring



Pipettes or eyedropper



Small bowl

Method:

1. Fill the large jar with water, leaving 2 inches at the top.
2. Add the shaving cream to the top of the water until it reaches the top of the jar.
3. Next, add 1 cup of water to the small bowl and 3 drops of blue food colouring.
4. Mix the water and food colouring together.
5. Use the pipette to add drops of the water mixture to the top of the shaving cream cloud.
6. Continue adding the water mixture until you begin to notice the raindrops begin to break through the bottom of the cloud.



Dancing Raisins

Materials



Raisins



Still water



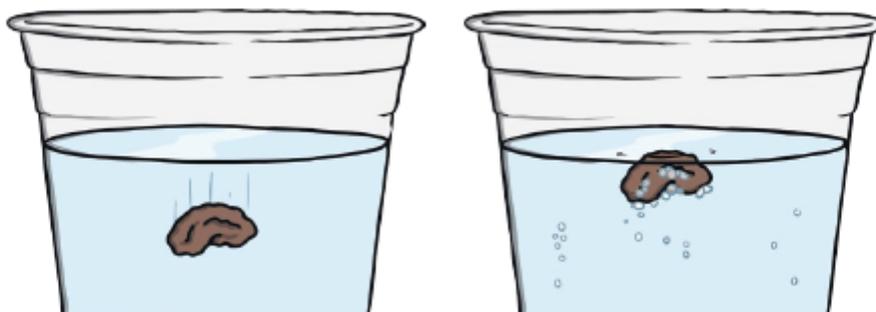
Fizzy Water



Two clear,
plastic cups

Instructions

- 1** First, carefully pour some still water into a clear, plastic cup.
- 2** Gently, drop a raisin into the water. Did it float or sink?
- 3** Next, pour some fizzy water into a different clear, plastic cup.
- 4** Gently, drop a raisin into the water. Did it float or sink?
- 5** What was the difference between the two reactions. Why do you think this was?



The Science Bit

In the still water cup, the raisin sinks because the raisin is denser than the water.

In the fizzy water cup, the raisin is again denser than the water. However, the bubbles get trapped in the grooves of the raisin, helping it to float back to the surface. When the bubbles pop, the raisin sinks back down.

Lava Lamp

You Will Need

- Water
- Vegetable Oil*
- A Clear Plastic Bottle or Jar
- Food Colouring
- Effervescent Tablets



* Please dispose of oil safely and responsibly.

Method

- 1 Fill the bottle or jar a quarter full with water.
- 2 Top up, almost to the top with the vegetable oil
- 3 They should separate into two layers, water at the bottom and oil sitting on top.
- 4 Add about 6-8 drops of food colouring once the oil and water separate.
- 5 The colour will mix with the water at the bottom.
- 6 Pop in half an effervescent tablets and watch the bubbles form. Add more effervescent tablets bit by bit to keep the bubbles rising and falling.

The Science Bit

Firstly water and oil will not mix – this is because we say that water is a polar molecule – its structure means that it has a positive charge on one end and a negative charge on the other. Water molecules stick together because the positive end of one water molecule is attracted to the negative end of another. Oil molecule structure is different – it is non polar, meaning that its charge is more evenly spread out, so the oil is not attracted to water – in fact we call it hydrophobic (water fearing) so it tries to get as far away from water as possible and will not mix. The reason that oil rests on top of the water rather than underneath is because it has a different density to water.

As the effervescent tablets are added (this is made of citric acid and sodium bicarbonate) it reacts with the water and forms carbon dioxide gas and sodium citrate. It is the carbon dioxide bubbles that carry the coloured water to the top.

Old Class, New Class



Things I liked doing in my old class:



Things I am looking forward to doing in my new class:



I would like to ask my new teacher...

My Five Senses Scavenger Hunt

Something smooth



Something rough



Something that makes a noise



Something round



Something yellow



Something that came from a plant



Something that has a smell



Something long



Something man-made



Something soft



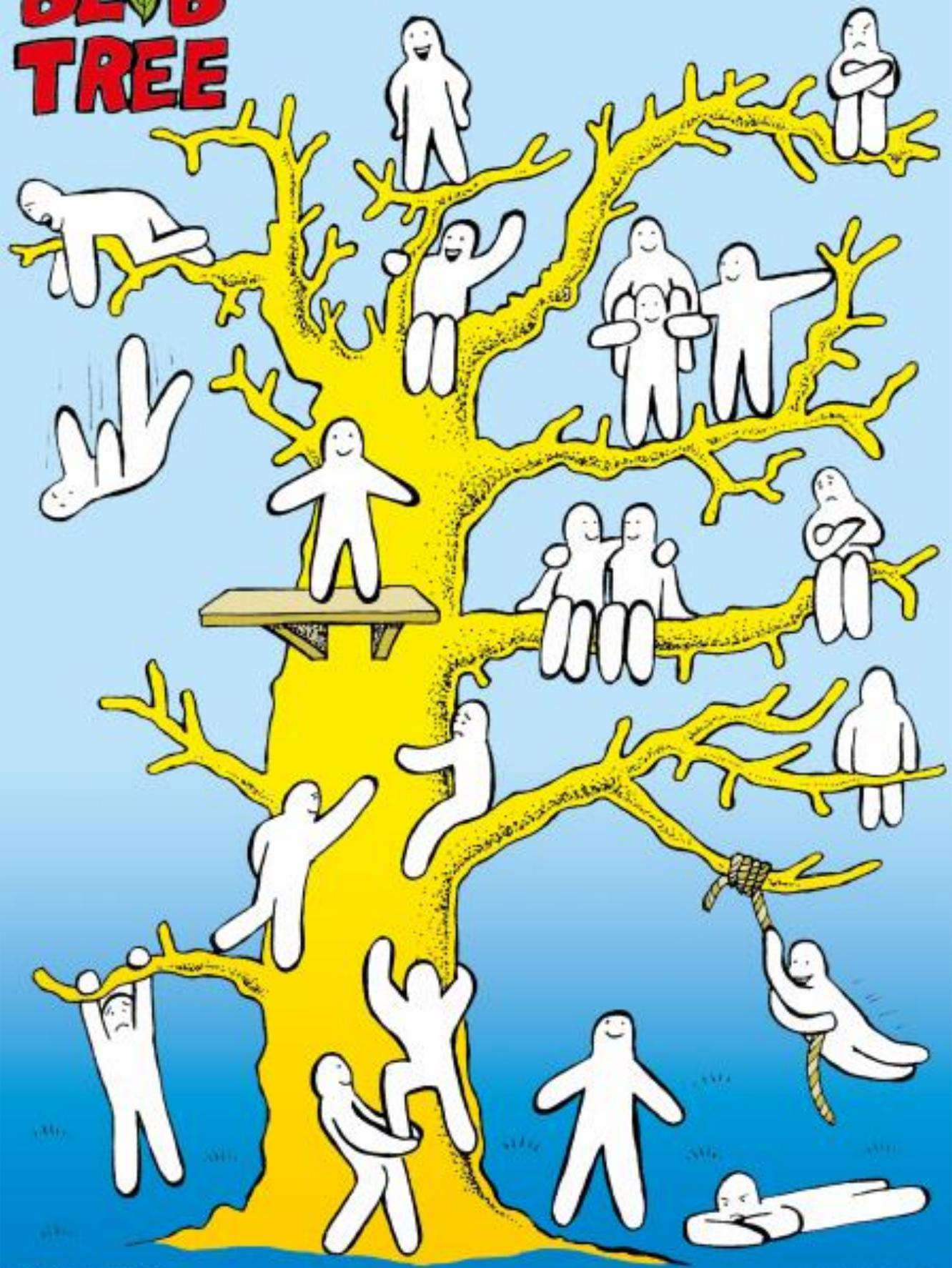
Something you can eat

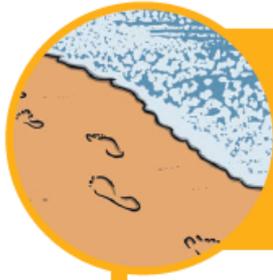


Something red



BLOB TREE





Summer Outdoor Learning Activities

Even if the weather isn't perfect, summer is a great time for outdoor learning. Here are some great ideas to try with your little ones this summer. Just remember a hat and sunscreen if it is warm!

Paint some stones: On a trip to the beach, collect some large, smooth pebbles in different colours. Paint them with normal ready-mixed paint, and then paint a layer of PVA glue over the top to protect them and make them shiny.

Visit a fruit farm: Children love picking (and eating) their own fruit, and what you manage to bring back can be turned into ice pops (freeze in moulds with juice) or eaten with cream or ice cream. You could also talk about the different tastes and colours of the fruit.

Create a beach day in your back garden: Fill a paddling pool, get out of the house and buy a bag of play sand from the DIY store. Use old kitchen utensils, yogurt pots and other containers to make sandcastles and sculptures.

Go on a sensory walk. Stop occasionally to talk about what you can see, hear, feel and smell.

On a sunny day, make a sundial. Choose a strong, sturdy stick and push it upright into the ground, somewhere that is in the open sun. Once the time hits the hour, use a marked stone or write the time on the ground at the end of the stick's shadow. You can then carry on marking the time at hourly intervals to create your very own sundial. Use it the next day to tell the time.

Mix sand with paint and create a beach picture with lots of lovely texture. Add some shells and brightly coloured scraps of paper to make deckchairs, kites and sunbathers!

Go on a walk in the country and collect a posy of wild flowers. Remember to be respectful of the environment, and avoid picking anything which may be poisonous. Bring the flowers home and arrange them beautifully in a vase. Alternatively, press the flowers in layers of kitchen roll between the pages of a heavy book.

Take a camera out with you on a walk and take photos to represent the colours of the rainbow - blue sky, green grass, purple berries, etc. Print the photos off and create a rainbow collage.

Make salt trails: Dissolve a few teaspoons of salt into a cup of water, then use this to paint patterns onto a piece of coloured paper. Leave to dry in the sun and you will reveal beautiful salt trails.

Bubble Painting

Awe and Wonder

Soap Bubbles Prints

You will need:



Ready mix
paint

Shallow tray



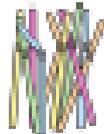
Water



Brushes



Washing-up
liquid



Straws



White
paper



Paint pots

Method:

1. Mix together, $\frac{1}{3}$ ready mix paint, $\frac{1}{3}$ water and $\frac{1}{3}$ washing up liquid in a paint pot.
2. Pour into a shallow tray.
3. Take a straw, place into the liquid and begin to blow, make sure not to suck otherwise you'll end up with a mouth full of paint!
4. Move the straw around creating bubbles.
5. Once the tray is full of bubbles take a sheet of paper and lay it carefully on top of the tray pressing down gently.
6. Lift it off and see the print you have created of the bubbles.



The Science Bit

Because washing up liquid can hold air inside its bubbles when you blow air in to the mixture it stays there creating lots of coloured bubbles. Because there is water in the mixture when you put paper on top of it the water is sucked into the paper, leaving a print.

Photo courtesy of @KateMcDonald1981 on Twitter - granted under creative commons license - attribution

Summer crafts

twinkl

Craft Instructions

Seaside In A Bottle

Supplies

- Plastic water bottle
- Sand
- Assortment of shells
- Pebbles
- Funnel
- Blue food colouring
- Washing up liquid



- Card
- Fine line pen
- Ribbon or string
- Hole punch



- 1 Using a funnel, pour sand into the plastic bottle until it is $\frac{1}{4}$ full.



- 2 Now choose objects to make your seaside scene! We used shells and pebbles.



- 3 Add a few drops of blue food colouring and washing up liquid to the water.



- 4 Top the bottle up with water, again using the funnel to pour.



- 5 Screw the lid tightly onto the bottle. Now place it on its side and allow the contents to settle. You should end up with your very own seaside scene!



- 6 Now make a tag for your bottle. Using scissors, cut out a small rectangular shape from the card. Then use a hole punch to make a hole at one end. We stained ours with tea to make it look old.



- 7 Using a fine line pen, write a message such as 'My Seaside in a bottle' onto the tag.



- 8 Thread a length of ribbon or wool round the neck of the bottle and tie the tag on to it.

Nature Photo Frames

You will need:

- four large sticks or twigs
- a selection of stones
- a selection of flower heads and stems
- grass
- a selection of leaves
- petals



The Activity:

1. Go on a nature treasure hunt around your garden or near to your home. Allow your child to be creative and search out lots of different items, collecting as many items and colours as possible.
2. Decide with your child what material they would like their photo frame to be made out of. It could be made from sticks, flower stems, wooden planks or even lots of small stones. It could even be a mixture of different items, depending on what you find.
3. Create your photo frame making a square shape.
4. Using your collected items, create a picture inside your photo frame. Your child could create a portrait of themselves or a picture of something that makes them happy e.g. a pattern, a place, another person or an animal.

