Year 6

Home Learning 6

Here are some topics which you can work from at home. All work can be recorded in a way you choose. This grid is similar to what the Year 6 children are learning about in school.

Each day we put a 'Word of the Day' on the grid below. See if you can:

- *Find the definition*
- *Use the word in a sentence*
- *List any synonyms*
- *List any antonyms*
- *Use the word in a different context*
- *Use an image to represent the word - be creative!*

		English	Maths	Outdoor learning	Science	Creative/Transition
Monday	amateur	**Grammar:** Login to SPAG.com and complete tests. There is also an additional grammar activity below.	**Starter:** https://myminimaths.co.uk/year-6-to-7-transition-week-7-perimeter-and-area-of-compound-shapes-monday/ **Perimeter** https://classroom.thenational.academy/lessons/perimeter	Here is a list of the best things to do before you're 11 ¾. You'll find fun things to do for every kind of outside place, from mountains to sea, forests to fields. Go out there and see how many you can do! https://nt.global.ssl.fastly.net/documents/50-things-activity-list.pdf	Please see the science activity below.	**Art Discovery** Look at the art work that Romero Britto has produced. Which one is your favourite and why? Sketch parts of the drawing that you like.
Tuesday	committee	**Research** Use the internet to research our artist, Romero Britto. Collate your information using a method of your choice.	**Starter:** https://myminimaths.co.uk/year-6-to-7-transition-week-7-perimeter-and-area-of-compound-shapes-tuesday/ **Area** https://classroom.thenational.academy/lessons/defining-area		Please see the science activity below.	**Zentangles** Create a Zentangle using primary colours. Create 6 4x4 boxes on paper. Use primary colours to create the Zentangle patterns.

Wednesday	criticise	**Writing** Using the research you have gathered about Romero Britto, create an information fact-file	**Starter:** https://myminimaths.co.uk/year-6-to-7-transition-week-7-perimeter-and-area-of-compound-shapes-wednesday/ **Area and perimeter of rectangles:** https://classroom.thenational.academy/lessons/area-and-perimeter-of-rectangles			You have achieved so much at primary school and now it is time to reflect what makes you proud. Ask your child to create a 'wheel of achievements' that displays your proudest moment. You can label each sections with headings such as Maths, English, P.E, Friendships, Hobbies. Inside each segment your child you can either draw a picture or write a sentence to show what they are proud of.
Thursday	hindrance	**Spelling activity:** Work with a partner, each choose 10 Year 6 spelling words and create a word search for your partner. Log on to Spelling Shed.	**Starter:** https://myminimaths.co.uk/year-6-to-7-transition-week-7-perimeter-and-area-of-compound-shapes-thursday/ **Area of triangles** https://classroom.thenational.academy/lessons/area-of-triangles		Please see the science activity below.	Some of your best memories are the silly ones that make you giggle. Create an amusing comic strip of a funny moment from your school journey. Include thought and speech bubbles to bring the comic to life. Use bold colours for your illustrations.
Friday	pronunciation	**Reading Comprehension** Please see the activity below.	**Starter:** https://myminimaths.co.uk/year-6-to-7-transition-week-7-perimeter-and-area-of-compound-shapes-friday/ **Area of composite shapes:** https://classroom.thenational.academy/lessons/area-of-composite-shapes/		Please see the science activity below.	Create a 'bucket list' of things you wish to achieve in your first year of secondary school. This could include making new friends for example.

Reading Comprehension

Rosa Parks

Rosa Parks was an African-American woman who made history with her comparatively small action of sitting still on a bus, which went on to spark major changes in American society.

Early Life

Rosa Parks was born on 4th February, 1913 and grew up mainly on a farm with her mother, brother and grandparents in Montgomery, Alabama, USA. She grew up at a time when American was segregated for black and white people.

Segregation in America

Segregation meant that many things for black and white people had to be separated by law. They had to use separate toilets, water fountains, entrances to public buildings and black and white children went to separate schools. It was also quite obvious that all the black facilities were not as clean or as modern as white facilities. Not only were black and white people segregated; black people were treated worse than white people within society.

The Bus Ride That Changed History

On 1st December, 1955, Rosa Parks was travelling home from work on a bus and sitting – as she had to – in the section allocated for black people at the back of the bus. The bus companies always moved black people further back or made them stand if the section allocated for white people was full and a white person needed to sit down. This happened to Rosa and she was told to move further back to give her seat to a white person...but she did not move. She was threatened with police action but she stayed put. Eventually, the police arrested, charged and fined her for breaking the law.

What Happened Next?

Amazingly, Rosa's behaviour unleashed a wave of protest and 40 000 black people in the area (and some white people) supported a bus boycott (a refusal to use the bus services in Montgomery). The bus companies lost a lot of money and the amount of people involved could not be ignored. The newspapers reported it and the boycott went on for 381 days, before it came to the attention of the government and just over a year later, in December 1956, the segregation on buses was lifted.

Rosa's actions made history as they sparked a movement to make a change. Even though it wasn't the end of segregation and civil rights still had a long way to go, it was a victory.

"People always say that I didn't give up my seat because I was tired, but that isn't true. I was not tired physically, or no more tired than I usually was at the end of a working day. I was not old, although some people have an image of me as being old then. I was forty-two. No, the only tired I was, was tired of giving in."

Parks, Rosa; James Haskins (1992). Rosa Parks: My Story. Dial Books. p. 116

Rosa Parks **Questions**

Try and answer the questions using full sentences.

1. Where did Rosa grow up?

2. What is 'segregation'?

3. How were the facilities provided for black and white people different?

4. How old was Rosa when she did not move on the bus?

5. If you boycott something, what are you doing?

6. In 1955, how were the buses in Montgomery segregated?

7. In 'The Bus Ride That Changed History' section, why has the author used an ellipsis?

8. Near the end of the text, the author writes that 'it wasn't the end of segregation'. When the bus laws were changed, why wasn't it the end of segregation?

9. In Rosa's quote, what was Rosa tired of and why do you think this was?

10. What sort of characteristics and qualities do you think Rosa Parks had? Give reasons for your answers.

Colons, semi-colons and dashes

1. Insert the semi-colon in the correct place in these sentences.

a) The woodland creatures each lived in their own cosy homes: badger, in his set rabbit, in her burrow and fox, in his den.

b) High in the trees the birds twittered the wood was alive with beautiful music.

c) Leaves fluttered softly to the ground a soft red carpet emerged.

d) Describe when you would use a semi-colon in your writing.

2. Insert the colons in the correct place in these sentences.

a) At the seaside the waves crashed noisily against the shore the storm had whipped up a frenzy of sea-foam.

b) Don't forget to do your chores the washing, ironing and dusting.

c) Sadie's project was doomed to fail she had run out of time to finish.

d) Describe when you would use a colon in your writing.

3. Insert the dashes in the correct place in these sentences.

a) Monkeys are my favourite animal I think they're really funny.

b) Tom Francis who was a usually a really cool guy fell flat on his face in ballet class.

c) Stacey ran as fast as she could she had to catch that bus!

d) Describe when you would use a dash in your writing.

Science

Activity 1

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.

For Older Children

Everything is made of particles which are always moving. When a soluble solid (solute) is mixed with the right liquid (solvent), it forms a solution. This process is called dissolving.

Two things that affect the speed at which the solid dissolves are temperature and the size of the grains of the solid. Caster sugar which is made of fine particles will dissolve quickly, but bigger sugar particles will take longer.

Solids dissolve faster in hot water as in hot water the water molecules are moving faster, so bump into the solid more often which increases the rate of reaction.

Activity 2

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.

Activity 3

Fun with Density

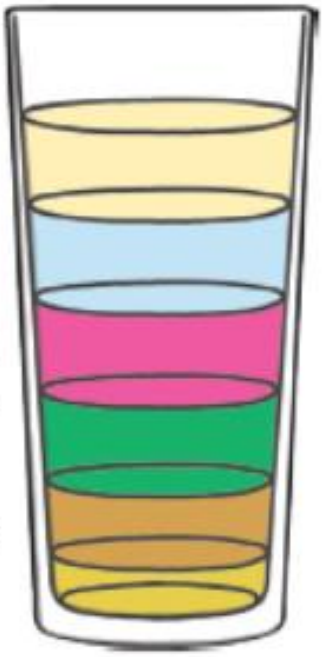
You Will Need

- Honey
- Milk
- Water
- A Glass
- Vegetable oil*
- Food colourings
- Golden syrup
- Washing up liquid

* Please dispose of oil safely and responsibly.

Density is a really tough concept to grasp. We confuse ourselves by referring to our weight all the time when we really mean our **mass**. **Mass** is effectively 'how much stuff' is there. **Density** is how much mass is in a volume (or space).

One way to illustrate density is to pour different liquids (which have different densities) on top of each other. The liquids with the greatest density sink to the bottom.



Method

1. Measure out the same volume of each of the liquids. Colour the water and the milk if you wish.
2. Starting from the bottom, pour in the honey. Make sure it goes into the middle of the glass and that you don't get any honey on the sides.
3. Slowly pour the golden syrup on top, followed by the washing up liquid.
4. Then add the milk, followed by the water.
5. Finally top with vegetable oil and admire your rainbow glass!

The Science Bit

Each of the liquids have a different mass of molecules or different numbers of parts squashed into the same volume of liquid, this makes them have different densities and therefore one can sit on top of the other – the more dense a liquid is the heavier it is.

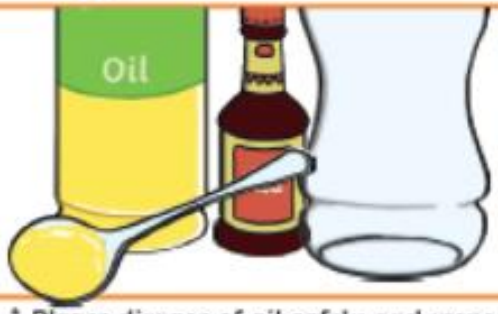
Do you think you could float small objects on each of the different levels? We'd love to see a photo if you can.

Activity 4

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 is has a positive charge one end and a negative charge 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 is added (this is made of citric acid and sodium bicarbonate) it reacts with the water and form carbon dioxide gas and sodium citrate. It is the carbon dioxide bubbles that carry the coloured water to the top.