Year 4 Practical Activities w/c 29th June 2020

Have a look at the following activities. Why not try some of them out? You could send a photograph of your work to your teacher at year4@brampton.newham.sch.uk.

English and PSHE

Look carefully at the picture below. Answer the following questions:

- Who are the people? What is their relationship?
- Why are they here? What are they doing? Why?
- How are they feeling?
- Why do people stargaze?
- Why do you think Pascal Campion called this image 'Special'?
- What is special to you?

Write about a special moment you've shared with someone. Create some artwork to illustrate this moment – try to capture why it was special.

Credit: https://www.onceuponapicture.co.uk/the-collections/the-pshe-collection/

SPECIAL

Credit: Pascal Campion

Mathematics

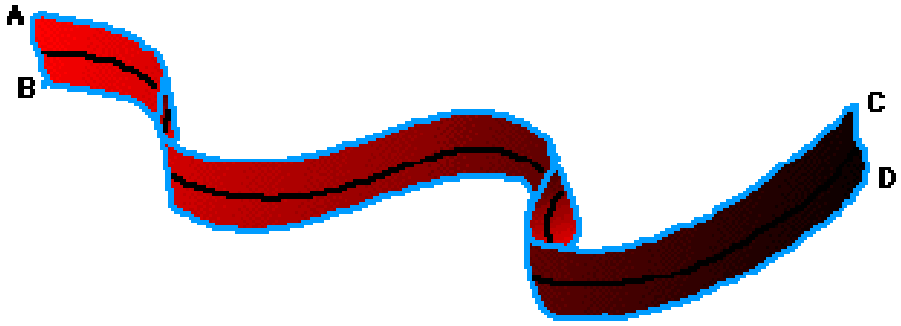
Make a Magic Circle - a never-ending, one-sided shape. Credit: https://nrich.maths.org/

You will need :

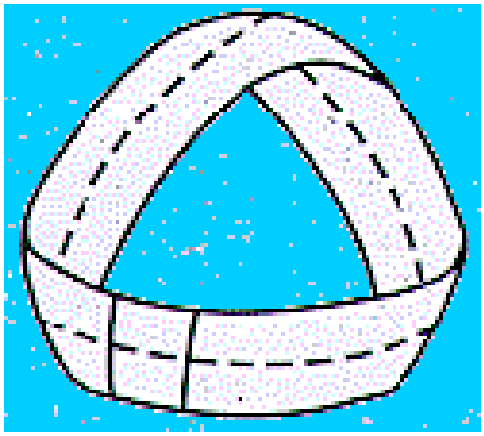
- A sheet of paper - A4 or A3
- Coloured pencils
- A pair of scissors
- Sellotape or Scotch tape

What to do :

1. Cut a long, thin strip from the full length of your sheet of paper.
2. Write the letters A,B,C and D as shown in the diagram.



3. Draw a line right down the centre of the strip of paper, starting mid-way between A and B and ending mid-way between C and D. Or you can colour each side of the strip in a different colour.
4. Twist the strip and tape the two ends together so that "A" touches "D" and "B" touches "C." Your strip should now look like this:



5. If you look at the line that you drew what do you notice? If you coloured the strip, do the same colours match up,? Do you end up back where you started?
6. The really interesting thing about this strip, are all the things that you can now do with it. For instance, cut your strip down the middle, as though you are cutting two, thinner strips. But do you get two?
7. How many edges does the new band have? How many sides does it have? How many twists are there in the ring? What have you discovered?

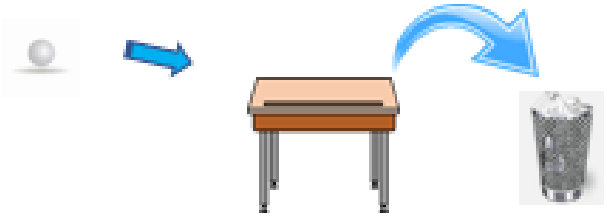
The name of this strip is a Mobius Strip or Band after the mathematician, **Alfred Mobius.**

PE

Can you complete the challenges below? You will need a ball, a table and a waste paper bin and/or box.

Credit: stew123 tes.com

Bounce



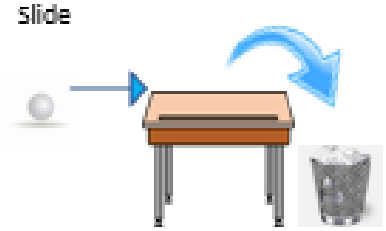
Challenge 1

- **Aim: Bounce ball into bin**
- Using table tennis ball
- Student bounces ball once on table
- With aim of getting ball into the bin

Differentiate:

- Move bin closer
- Move bin further away

Slide



Challenge 2

- **Aim: Slide ball along table into the bin**
- From end of long(er) table
- Student slides ball along table to fall in bin

Differentiate:

- Move bin closer – easy
- Move bin further away – get students to think how they can do it?

Challenge 3

- **Aim: To simply throw ball into bin**
- Student stands at end of table
- Student throws ball into the bin directly

Differentiate:

- Change size of the target
- Make target bigger – so to make it easy, use a bigger target like a box
- Make the target smaller – so to make it harder, use a smaller box or container

D&T/Art/Science

Try making the project of a tin foil tree frog on the next page. What habitat can tree frogs be found in? What dangers do their habitat face? What can we do to help?

You could do one of the following to highlight the problems and what we can do to help:

- Write a poem or song
- Make a poster
- Write a letter to the Prime Minister Boris Johnson
- Create a story book


This has been an
"art jumpstart"
by Darrell Wakelam
Tin Foil Tree Frog
. . . instructions on next photo


1 - Roll up some tin foil to make a simple 'branch' and tape it to a cardboard base.
2 - Cut a simple body and head shape from thin card.
3 - Cut slits in the shapes and pull together to make them more 3D . . .
then attach them just above the branch.
4 - Roll up 9 thin foil 'worms', then cut 3 in half so you've got 6 for the back legs and 6 for the smaller front legs.
5 - Tape these together and open the toes.
6 - Attach the front legs on . . . I've tucked the one behind the body to make it look more 3D.
7 - Now fix the back legs on, bend them to make them more realistic.
8 - Roll up more tin foil to make eyes, eyelids and a mouth.
9 - Now it's ready to paper maché, collage or paint.
Tin Foil Tree Frog
This has been an
"art jumpstart"
by Darrell Wakelam

Science

Is it possible to make a boat powered by soap? You could use a piece of card to make the boat and if you don't have a toothpick, you could use the end of a fork or something else to put washing up liquid onto your model boat.

SCIENCE BOB .COM

BUILD A SOAP-POWERED MODEL BOAT!

YOU WILL NEED:

- A foam tray (like the kind meat comes in) or a piece of non-currogated cardboard
- A tray, bowl, or cookie sheet full of water
- Liquid dish soap
- A toothpick

WHAT TO DO

1. Cut the foam tray or cardboard into a boat shape as shown here. A good size seems to be about 2 inches long.

2. Dip the toothpick into the liquid soap and use the toothpick to put soap onto the sides of the notch at the back of the boat.

3. That's it! Now carefully place the boat onto the surface of the water and watch it scoot across the water for several seconds - you've made a soap-powered boat! To demonstrate the boat again, you will need to rinse out the tray to remove any soap from the previous demonstration.

HOW DOES IT WORK?

Soap is a rufactant - that means that it breaks down the surface tension of water. As the surface tension is broken up, it creates enough of a force to push the lightweight boat across the surface.

MAKE IT AN EXPERIMENT:

The above is a DEMONSTRATION. To make it a true experiment, you can try to answer these questions:

1. Does liquid soap last longer than a solid piece of soap?

2. Does warm water work better than cold water?

3. What materials make the best floating boat?