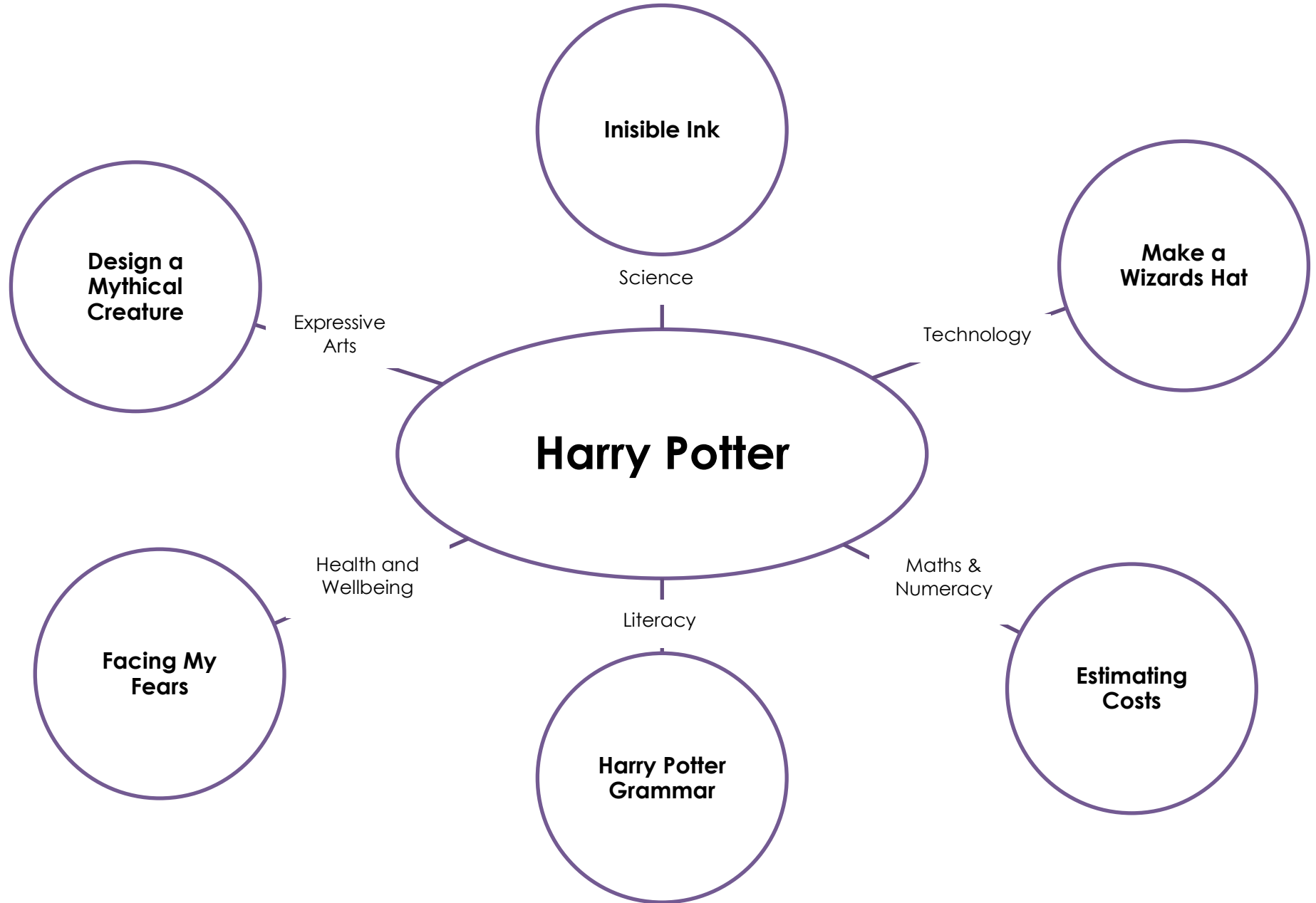




Learning from Home



Science Challenge



Invisible Ink

When Hermione finds Tom Riddle's diary in **The Chamber of Secrets**, she casts a revealing charm on its blank pages, hoping that the content will be shown, but alas this does not work.

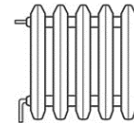
Your Task: Recreate secret writing for yourself.



You Will Need: paper, a lemon, water, small bowl, spoon, cotton buds (or small paint brush), and a heat source like a light bulb or radiator.

Instructions:

1. Squeeze the lemon juice into the bowl.
2. Add about a teaspoon (tsp) of water and stir with the spoon.
3. Now write a secret message on your paper by first soaking your cotton bud (or paint brush) in the mixture and using it as your writing tool.
4. Wait for your paper to dry.
5. Now give your message to a brother, sister or an adult at home and ask them to reveal the secret message. They will need to hold the paper next to a heat source for a minute or two. (**Burn hazard: Adult supervision recommended to avoid burn injury!**)



Extension: You could try this activity using other acidic liquids such as apple juice and / or vinegar – which works best?

Safety: Be careful with the heat source – paper can burn. This could cause injury!

The Science: Lemon juice and other acidic juices from other fruits and from vinegar, contain an element called carbon. Carbon compounds (carbon mixed with other molecules in the juice) are pretty much colourless at room temperature but heat can break down these compounds releasing the carbon. If carbon comes into contact with the air, a process called oxidation occurs and the substance turns brown. Oxidation is the same process that makes bananas and avocados turn brown.

Activity adapted from www.scientificamerican.com

Images from www.clipart-library.com

Technology Challenge



This Photo by Unknown Author is licensed under CC BY

Make a Wizards Hat

What you need:

- Paper
- Scissors
- Pencil
- Glue
- Stapler

Things to decorate your hat with: glitter, shiny paper etc.

What you do:



1. Cut out the semi circle.



2. Shape the semicircle into a cone. Make sure it fits your partners head. Make it a bit bigger than you need.



3. Ask an adult to staple it.



4. Put glue down the edge to hold the seam in place.



5. Stand the cone on top of another piece of card and draw around it. Make sure you don't press the cone- try to keep it in a circle shape.



6. Cut lots of small cuts around the bottom of the cone.



7. Fold out the cuts out.



8. Take the piece of card with the shape of the bottom of the cone on (that you drew around earlier) Draw a bigger circle around the smaller one (so it looks like a donut). Then cut out the circle, and the middle part.



9. Check that your donut shape fits over the top of the cone. If it doesn't ask an adult for help.



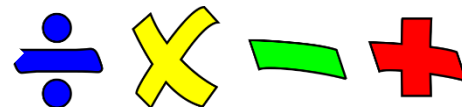
10. When your donut shape fits over the cone, out glue around the inside of it. Then, turn it over so that the glue is facing down. Put it back over the cone and press it down.



11. Finally, decorate your hat!

Activity and images from TES

Maths & Numeracy Challenge



This Photo by Unknown Author is licensed under [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/)

Estimating Costs

Fred and George have set up their new joke shop, **Weasleys' Wizard Wheezes**.

A range of practical jokes are for sale.



Fireworks

Basic Blaze Box	£91
Box O'Rockets	£67
Deflagration Deluxe	£83
Explosive Enterprises.....	£12
Wildfire Whiz- Bangs.....	£39

Skiving Snackboxes

Fainting Fancy.....	£16
Fever Fudge.....	£69
Nosebleed Nougat.....	£37
Puking Pastilles.....	£42

Magical Moustache Miracle Grow Collection

Dreary Whiskers.....	£14
Handsome Moustache.....	£71
Frenchman's Moustache	£19
Middle Age Beard.....	£45
Go Go Goatee.....	£26
Hairy Dame.....	£83
Weird Beard.....	£49
Instant Age.....	£62
Swift Stubble.....	£35

Task 1: Round the price of each product to the nearest tens number. (Remember if an item is halfway in between, then round up. E.g., £15 → £20, £25 → £30 etc.)

Task 2: Estimate the price of the following using your rounded values.

- 1 Basic Blaze Box + 2 Frenchman's Moustache's
- 2 Wildfire Whiz-Bangs + 2 Puking Pastilles
- 1 Instant Age + 2 Weird Beards + 1 Explosive Enterprise

Task 3: Find 3 items which might cost £210 altogether if estimating using the rounded values.

Activity and Images from TES

Literacy Challenge



This Photo by Unknown Author is licensed under [CC BY-SA-NC](https://creativecommons.org/licenses/by-sa/4.0/)

Harry Potter Grammar

Task 1: Can you remember what the following are? Write a definition into each box below. If you can't remember, use a dictionary or an internet search to find out.

A Noun:

An Adjective:

A Verb:

Task 2: Read the following paragraph from **Harry Potter and the Chamber of Secrets**.

The pixies shot in every direction like rockets. Two of them seized Neville by the ears and lifted him into the air. Several shot straight through the window, showering the back row with broken glass. The rest proceeded to wreck the classroom more effectively than a rampaging rhino. They grabbed ink bottles and sprayed the class with them, shredded books and papers, tore pictures from the walls, upended the waste bin, grabbed bags and books and threw them out of the smashed window; within minutes half the class was sheltering under desks and Neville was swinging from the candelabra in the ceiling.

- a. Highlight five nouns.
- b. Underline two adjectives.
- c. Tick five verbs.

Task 3: The following passage is taken from the first Harry Potter book. The adjectives and some verbs have been removed and are in a box below. Fill in the gaps.

As they _____ November, the weather _____ very _____. The mountains around the school became _____ and the lake was like _____ steel. Every morning the ground was _____ in frost. Hagrid could be seen from the upstairs windows _____ broomsticks on the quidditch pitch, bundled up in a _____ mole-skin overcoat, rabbit fur gloves and _____ beaver-skin boots.

icy	turned	chilled	covered	enormous
cold	defrosting	long	grey	entered

Activity from TES





Health & Wellbeing Challenge

Facing My Fears

Everybody is frightened of something. Sometimes that is with good reason and at other times it might not make sense to other people, but it is real for you. Harry Potter, for example, is terrified of dementors.



In **Harry Potter and the Prisoner of Azkaban**, Professor Lupin gives Harry a lesson on how to defeat dementors using a boggart. Boggarts are creatures which can shapeshift (change) into whatever frightens a person the most.

This is a list of things that I am frightened of:



If I saw a Boggart it would turn into _____

My Boggart would make me feel _____

My Boggart would look like _____

It would have _____

What could you do if you saw a Boggart?

1.
2.
3.

Imagine you are Harry, what could you think of to help you feel less scared?

If I was Harry, I would think of _____

because _____

Talk to an adult about what scares you and what you can do to feel better.

Activity from TES

Images from www.clipart-library.com



Expressive Arts Challenge



[This Photo](#) by Unknown Author is licensed under [CC BY-NC-ND](#)

Design a Mythical Creature

Harry Potter Creatures

Some creatures JK Rowling has included in her books are famous mythical creatures that she did not invent.



Three headed dog



Werewolf



Griffin
Half lion
Half eagle



Goblin



Centaur
Half man
Half horse



Troll



Dragon



Bowtruckle- a small wooden creature. It lives in trees, eats insects, and is hard to spot.



Grindylow- a small Waterdemon with octopus legs



Ashwinder- a serpent that is made from the embers of a magical fire that is left to burn out by itself



Niffler- a small creature with a snout which it uses for sniffing out treasure.

Activity and images from TES

A mythical creature is an imaginary creature – it is not real. Lots of mythical creatures have been described in fairy tales and were imagined hundreds, or thousands of years ago!

Your Task: Look at these creatures from Harry Potter, and then design our own mythical creature. You can use pencils, paints, chalks or any other media you prefer.

Give your creature a name. Can you describe its character / how it behaves?