



SCIENCE WEEK 2023

HOME ACTIVITY PACK

Created for Dale Primary School

ACTIVITY ONE: PET PROFILE

WHAT TO DO

Choose an animal you would like to have as a pet. Think about what you would need to do to take care of them. Complete the pet profile below.

DRAW YOUR PET OF CHOICE

Extensions:

- > Label their body parts
- > Label their senses (sight, taste, smell, sound & touch)

WHAT FOOD DO THEY NEED?

Extension: Include details of nutrients
(carbs, protein, vitamins etc.)

HOW DO THEY STAY HEALTHY?

*How would you take care of them? Give examples
of exercise, shelter and hygiene.*

WHERE DO THEY LIVE IN THE WILD?

*Draw and label their natural habitat
(where they would live/survive in the wild)*

DRAW THEIR BABY:

Extension: Think about and
label their similarities/
differences to their parents.

ACTIVITY TWO: CRESS HEADS

WHAT TO DO

Draw a funny face on the yoghurt pot. Wet the cotton wool, just so it's damp. Press the cress seeds into the wool and pop in the yoghurt pot. Put the pot on a sunny windowsill. Sprinkle with water daily. Watch your cress seeds grow :)

RECORD YOUR FINDINGS: CRESS HEADS DIARY *Draw and write about what you see each week*

WEEK ONE

WEEK TWO

WEEK THREE

WEEK FOUR

YOU WILL NEED:

- Cress seeds
- Clean yoghurt pot
- Cotton wool
- Pens for decoration

Extension: List the things a plant needs to survive and thrive >

Extension: Identify and label parts of a cress plant onto your diary. Include: seed, root, stem and leaf.

Extension: Choose a flowering plant you like. Draw and label its parts >

YOU WILL NEED:

Ice Cubes
Pan with a lid
A hob

Adult supervision

ACTIVITY THREE: MAKING RAIN

WHAT TO DO

- > Take the Ice cubes out of the freezer and have a good look.
- > Pop the ice cubes in a pan and wait for 5-10 minutes. What is happening to them?

Write or draw your findings:

- > Turn on the hob and wait for the water to boil. What is happening now?

Write or draw your findings:

- > Put the lid on the pan and leave for 2 minutes. What happens when you lift the lid?

Write or draw your findings:

- > Hold the pan lid above the steam for 1 minute. What has happened on the pan lid?

Write or draw your findings:

- > Wait a while for the water to cool. Pour the water back into a pot and put it back in the freezer. Leave it for 2 hours. Take it out and look again. What has happened now?

Write or draw your findings:

ACTIVITY FOUR: CASTING SHADOWS

WHAT TO DO

- > Using the black card, draw and cut out some shapes
- > Attach the shapes to pencils/sticks with tape
- > Shine a torch at the shapes, onto a plain wall
- > Experiment bringing the shapes forwards and backwards and observe the shadows.

YOU WILL NEED:

A torch
Black card
Pencils
Scissors
Tape

WHAT CAN YOU SEE? WHAT HAPPENS TO THE SHADOWS?

DRAW AND WRITE ABOUT YOUR EXPERIMENT HERE>

When an object blocks the beam of light a shadow forms. The closer the object to the light, the more it blocks out.

Extension: If you have a globe at home, shine the torch directly on the globe from one side. Move the globe around, keeping the light still. Can you see that the globe is only illuminated on the same side as the torch? The opposite side is dark, no matter how you move it? Light always travels in straight lines. It cannot curve around an object. This is why the sun only lights up one side of the earth at a time.

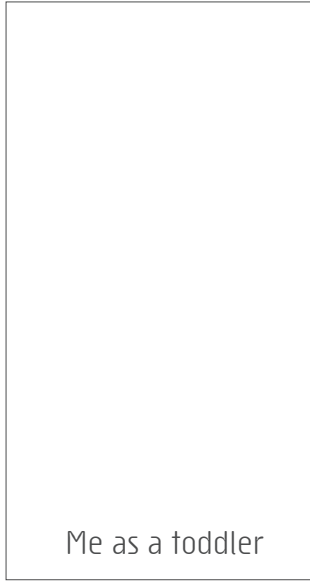
ACTIVITY FIVE: GROWING OLD

WHAT TO DO

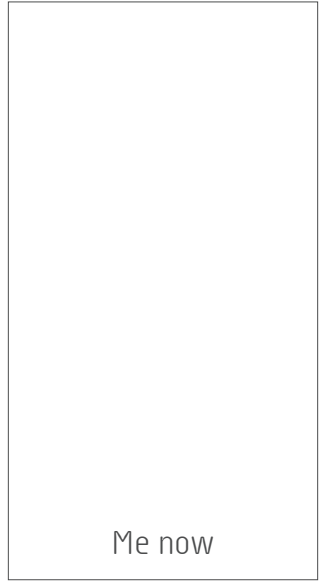
Using photos, or drawing pictures, fill out the growth chart below. What changes are taking place at each stage? Label the pictures using the vocabulary on the opposite page.



Me as a baby



Me as a toddler



Me now

Extension: Write about what you could do to help you live a long, happy and healthy life. *Include details about food, exercise, sleep and relationships.*

retire

go to college

drive a car

play with friends

get a job

feed myself

have grey hair

go out alone

have a baby

go to school

get a house

wash myself

read and write

get wrinkles

walk and talk

make my lunch

A teenage relative
or friend

My mum, dad
or teacher

A grandparent or
older relative/friend

Extension: Write about what bad choices you could make to risk living a healthy and happy life. Include details about food, habits, hygiene and lack of exercise.

ACTIVITY SIX: ZIP WIRE

WHAT TO DO

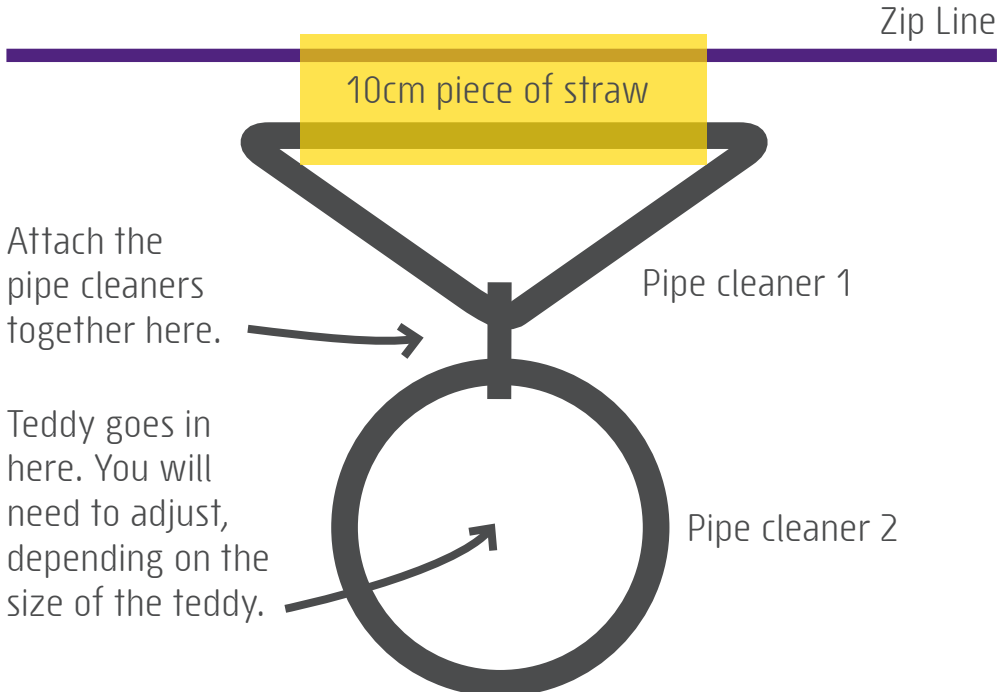
The aim is to create a zip wire for teddies, kids and families to enjoy. This experiment takes a bit of setting up, but it will be worth it once the fun starts! You will be testing different forces in action and recording the outcomes.

- > Cut a 10cm piece of straw
- > Thread a pipe cleaner through and fasten below in a triangle-shape (see illustration)
- > Using a second pipe cleaner, wrap around the teddy's middle, secure tightly and attach to the first pipe cleaner.
- > Slide the straw onto the highest end of the zip wire and let go!

MAKE PREDICTIONS: Which zip wire will be the fastest? Which teddy will be quickest? What else could you do to make the zip wire more effective?

YOU WILL NEED:

- 1 small teddy
- 1 medium teddy
- 1 large teddy
- straws
- pipe cleaners
- garden string
- thin, metal wire
- wool or ribbon
- Timer



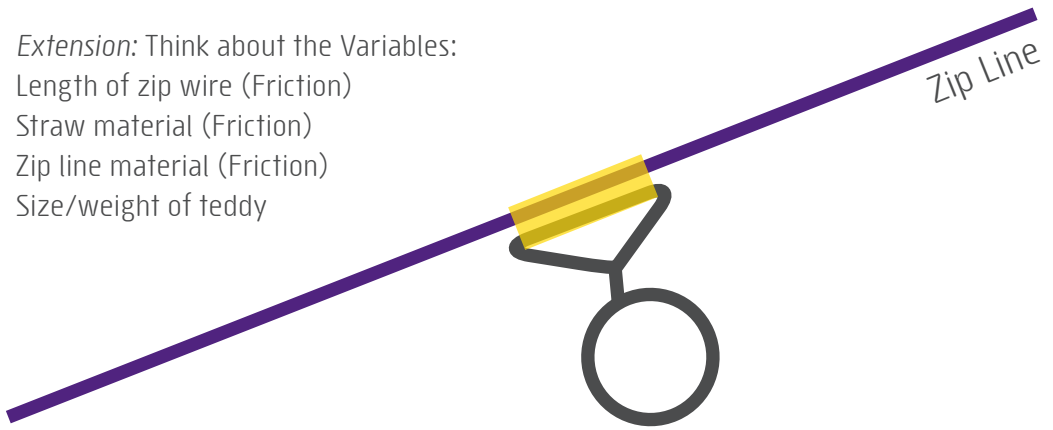
Extension: Think about the Variables:

Length of zip wire (Friction)

Straw material (Friction)

Zip line material (Friction)

Size/weight of teddy



RECORD YOUR OUTCOMES

Keep the length and incline of the wire the same for each experiment, to ensure that the data collected is fair.

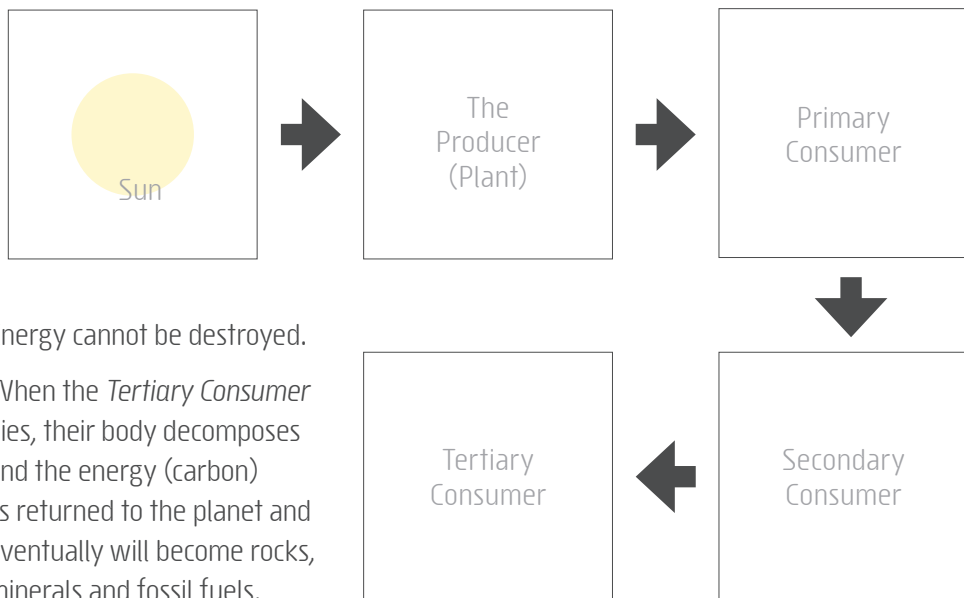
	Straw Material	Zip wire Material	Size/weight of teddy	Time taken, start to finish
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Extension: Write about which forces influenced the outcomes (gravity, friction, air resistance, did you give each teddy a push?)

ACTIVITY SEVEN: FOOD CHAINS

WHAT TO DO

- > Cut out the pictures from the food chain sheet
- > Starting with the sun, rearrange the pictures to show the food chain (flow of energy)
- > Once you are happy, glue the pictures below



Energy cannot be destroyed.

When the *Tertiary Consumer* dies, their body decomposes and the energy (carbon) is returned to the planet and eventually will become rocks, minerals and fossil fuels.

This booklet has been created for all age groups to enjoy. Work together to investigate and experiment as a family. Complete the extensions where age-appropriate. Discuss your outcomes and share your experiences. Please ask your class teacher if you have any questions.

dale.derby.sch.uk/curriculum-science

For more information about the Science curriculum at Dale, go to:

