

# Separate the different parts of this flower.

Can you name any of the parts?

What is the main function of a flower?



Investigate these items.

What is the name of this group of items?

How would you bring them to life?

Do all plants begin their life in the same way?

Can you think of different ways in which a plant's life could start?



### Look at the cards.

### Can you name each one?

Which ones might be important to plants? Why?

What do the words 'pollinate' and 'disperse' mean?

### 03 – PLANT LIFE CYCLE





### 03 - PLANT LIFE CYCLE

# **WATER**



### 03 - PLANT LIFE CYCLE

# **INSECTS**



### YEAR 5 LIFE CYCLES OF PLANTS AND ANIMALS: **03 – PLANT LIFE CYCLE**

### **OTHER ANIMALS**





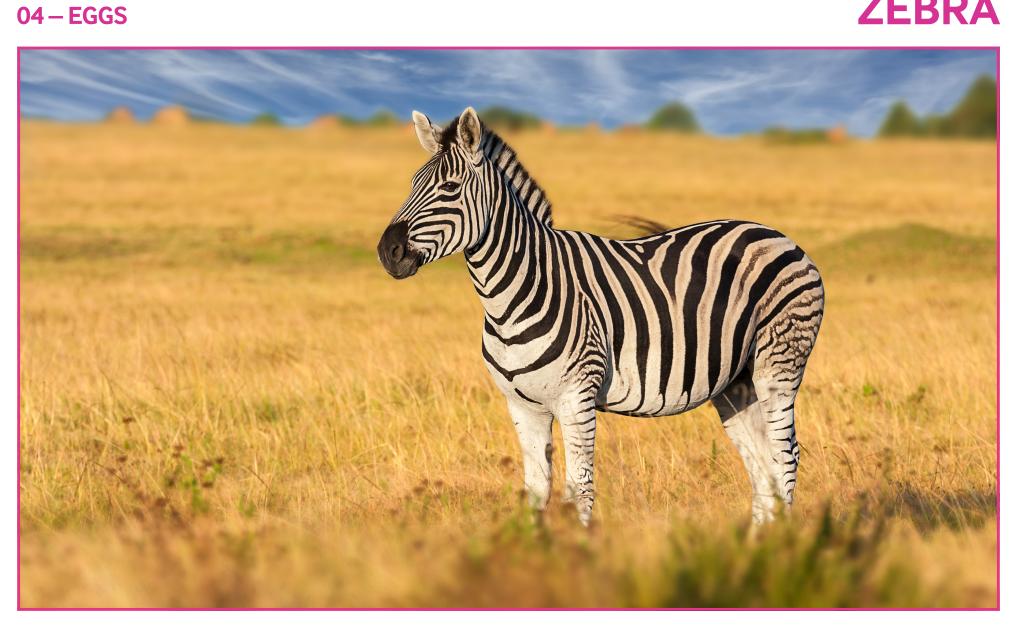
### Look at the cards.

# Can you sort them into reptiles, birds, fish, amphibians, minibeasts and other?

Which groups lay eggs?

What is the name of the 'other' group? Why don't they lay eggs?

**ZEBRA** 



04 – EGGS

# **PELICAN**

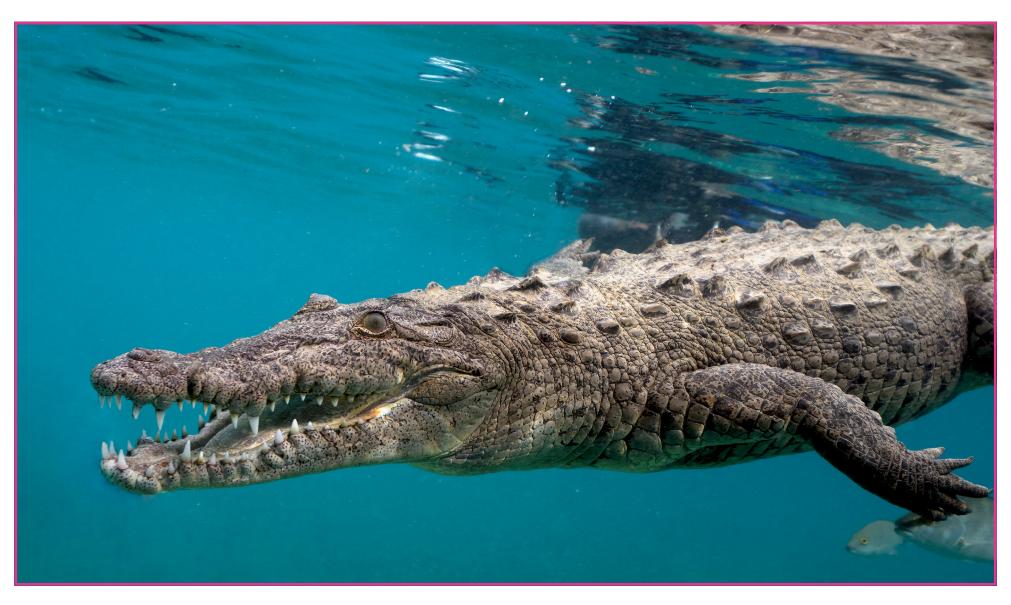


**04 – EGGS** 

# **SPIDER**



# **CROCODILE**



# **SALMON**



YEAR 5 LIFE CYCLES OF PLANTS AND ANIMALS: **04 – EGGS** 

# **NEWT**



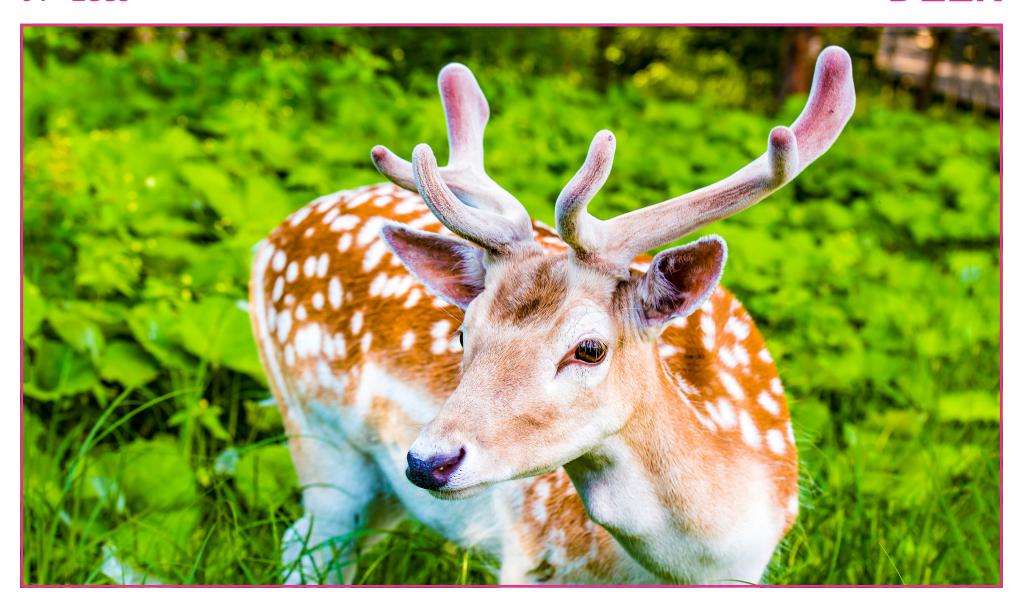
# 04-EGGS GOLDFISH



**FROG** 



**DEER** 



**PARROT** 

# 04 – EGGS



### 04 – EGGS

# **LADYBIRD**



# COW



# **SNAKE**



# **SEAL**

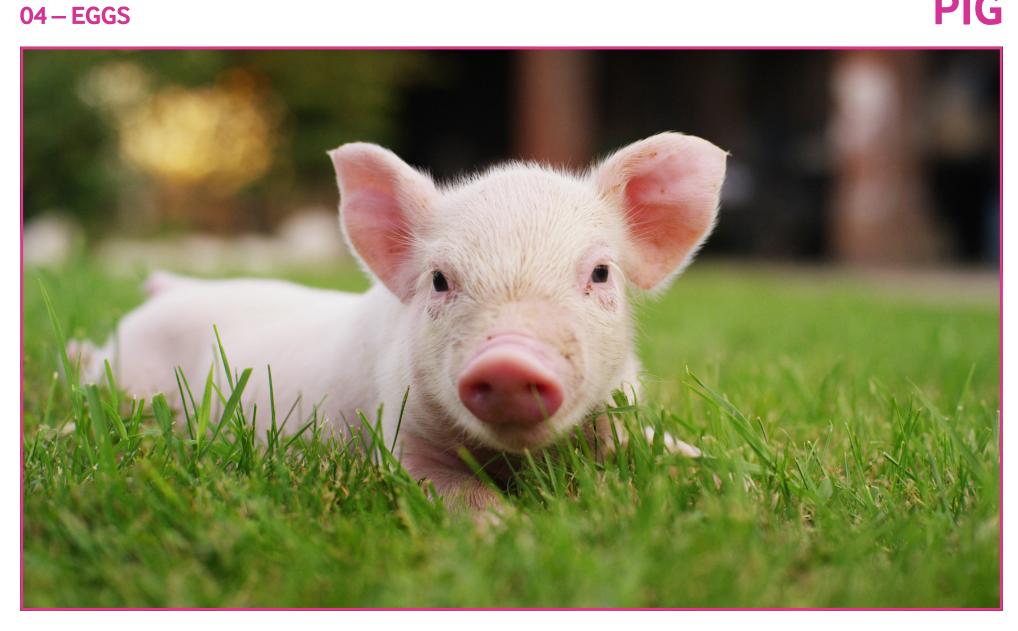


04 – EGGS

# **PENGUIN**



# PIG





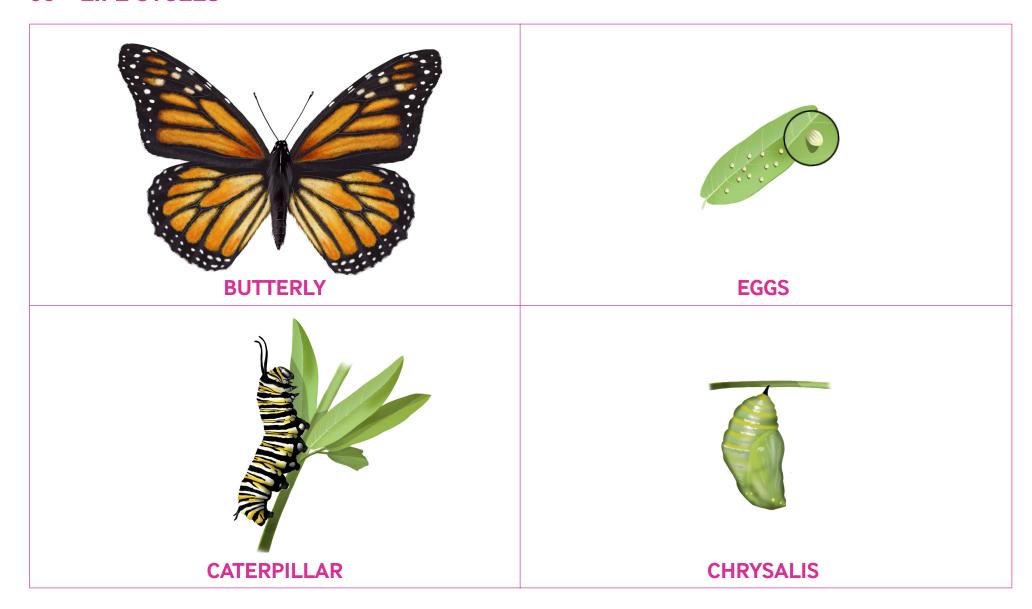
Examine the cards.

Can you sort them into the different life cycles?

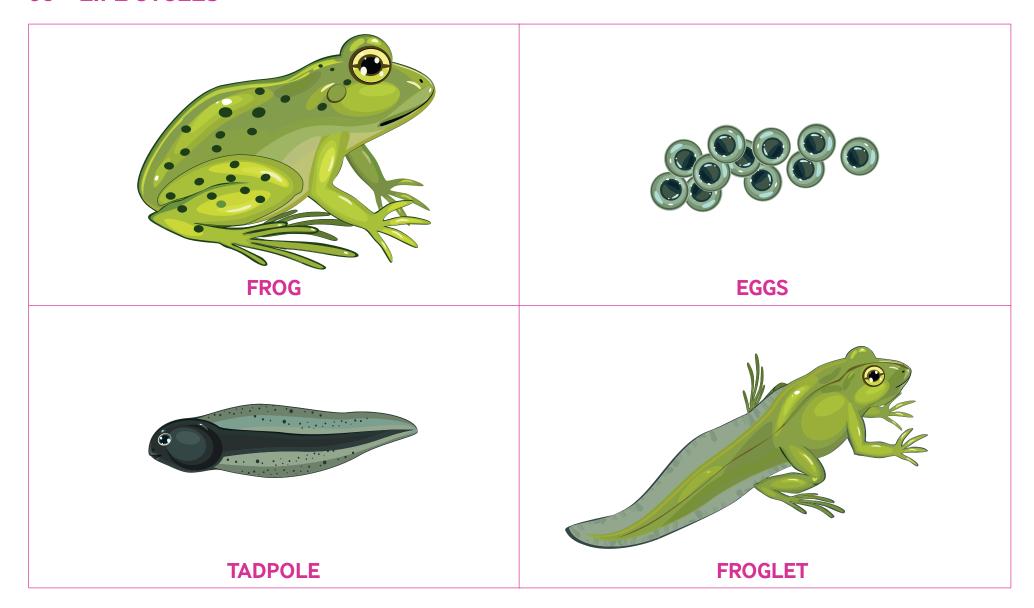
Can you put each life cycle into the correct order?

What is the same about each life cycle? What is different?

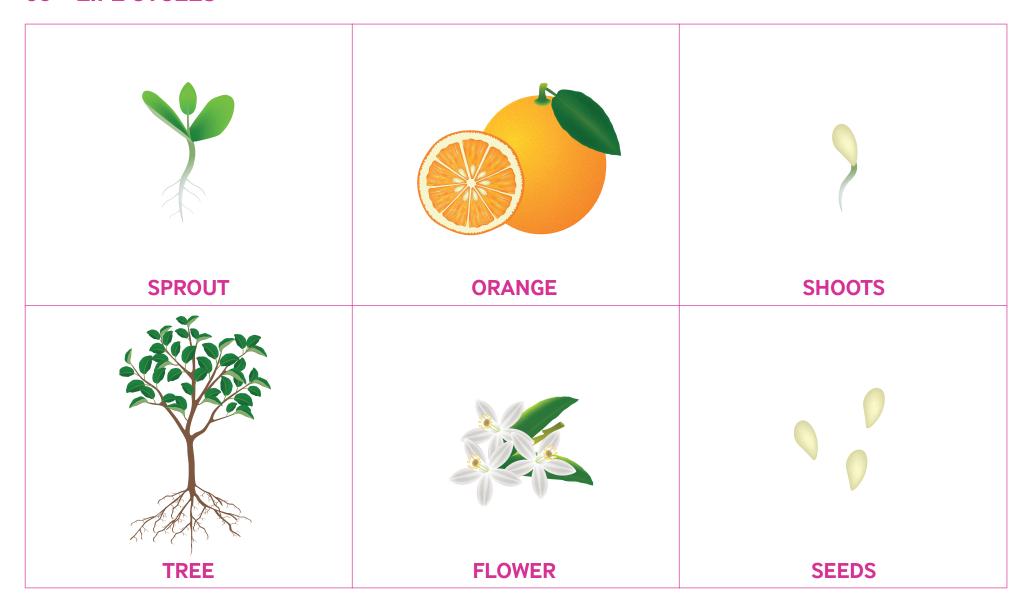
### 05 - LIFE CYCLES



### 05 - LIFE CYCLES



### 05 - LIFE CYCLES





# Use the play doh to recreate each part of a butterfly's lifecycle.

Can you name each stage?

How does the insect change each time?

01 – TIMELINE



Examine the cards.

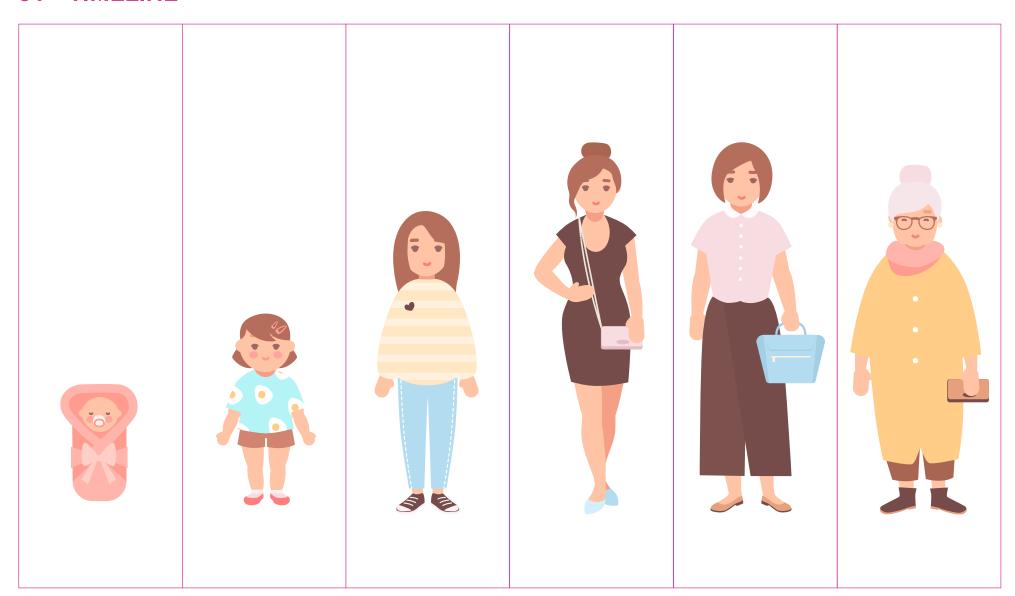
Can you put the cards in chronological order?

Can you name each stage?

How could we adapt this sequence to show the human life cycle?

YEAR 5 GROWTH AND DEVELOPMENT OF HUMANS:

### 01-TIMELINE





#### 02 – HUMAN GESTATION

Examine the cards.

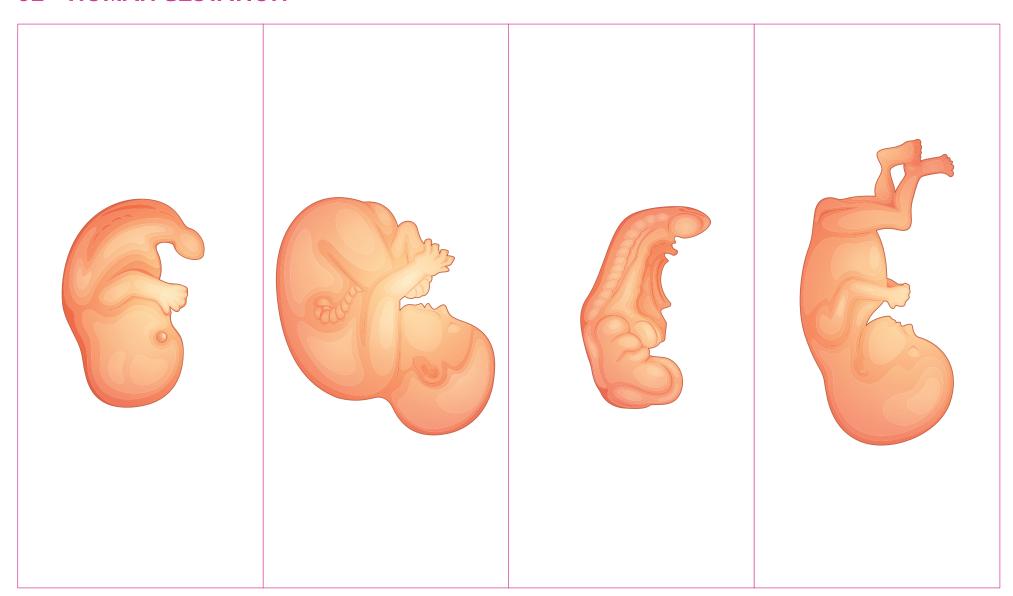
Can you put these cards in order of development?

How long does a human baby take to develop before it is born?

Where does a human baby develop?

YEAR 5 GROWTH AND DEVELOPMENT OF HUMANS:

### 02 – HUMAN GESTATION



03 – ANIMAL GESTATION



### Examine the cards.

### Can you name each animal?

Order the animals according to how long their babies take to develop before being born.

Why do some take longer to develop than others?

YEAR 5 GROWTH AND DEVELOPMENT OF HUMANS:

### 03 - ANIMAL GESTATION



### YEAR 5 GROWTH AND DEVELOPMENT OF HUMANS:

### 03 - ANIMAL GESTATION



#### YEAR 5 GROWTH AND DEVELOPMENT OF HUMANS:



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#### YEAR 5 GROWTH AND DEVELOPMENT OF HUMANS:





## Examine the cards.

# Can you put the cards into chronological order?

How much does an average newborn baby weigh? How much does an average one year-old weigh?

Can you match the development milestones to the correct picture?

YEAR 5 GROWTH AND DEVELOPMENT OF HUMANS:

#### 04 – BABY GROWTH



YEAR 5
GROWTH AND DEVELOPMENT OF HUMANS:

04 – BABY GROWTH

| FOCUSSING<br>AND SMILING | STANDING<br>AND TAKING<br>STEPS WITH<br>SUPPORT | LIFTING<br>HEAD AND<br>SHOULDERS | WALKING        |
|--------------------------|---|----------------------------------|----------------|
| SITTING                  | MAKING<br>SOUNDS                                | CRAWLING                         | FIRST<br>WORDS |

05 – PUBERTY



Examine the cards.

What is puberty?

Which of these changes are linked to puberty?

Can you sort them into those affecting boys, those affecting girls and those affecting both? Why do boys and girls experience different things?

YEAR 5
GROWTH AND DEVELOPMENT OF HUMANS: **05 – PUBERTY** 

| HAIR GROWTH              | EYES CHANGE                | PUBIC HAIR            | SKIN BECOMES     |
|--------------------------|----------------------------|-----------------------|------------------|
| IN ARMPITS               | COLOUR                     | GROWS                 | OILY             |
| TESTICLES AND PENIS GROW | BODY SWEATS                | FRECKLES              | GROW TALLER      |
|                          | MORE                       | INCREASE              | AND HEAVIER      |
| MOOD<br>SWINGS           | VOICE<br>BECOMES<br>DEEPER | BODY CHANGES<br>SHAPE | PERIODS<br>BEGIN |
| HAIR                     | BREASTS                    | FACIAL HAIR           | SKIN CHANGES     |
| FALLS OUT                | DEVELOP                    | APPEARS               | COLOUR           |



### Examine the statements.

# Which of these are necessary in order to keep healthy during puberty?

Why are each important?

Do these statements differ for boys and girls?

# YEAR 5 GROWTH AND DEVELOPMENT OF HUMANS: 06 – HEALTH DURING PUBERTY

| A HEALTHY<br>DIET           | A GIRLFRIEND<br>OR BOYFRIEND      | STRESS<br>MANAGEMENT<br>TECHNIQUES | LOTS OF<br>FRIENDS    |
|-----------------------------|-----------------------------------|------------------------------------|-----------------------|
| GOOD<br>PERSONAL<br>HYGIENE | GOOD<br>RELATIONS<br>WITH PARENTS | TIME OFF<br>SCHOOL                 | ADEQUATE<br>SLEEP     |
| REGULAR<br>EXERCISE         | A HEALTHY<br>BODY WEIGHT          | GOOD<br>ORGANISATION               | SOMEONE<br>TO TALK TO |





Throw the javelin as far as you can.

What makes it move forwards?

What makes it fall?

Can you name all the forces acting on the javelin as it travels through the air?
What about when it is back on the ground?





Examine the shoes and pull each one along the floor using a force meter.

What differences can you see?

Can you feel any differences as you pull them?

Why do you think this is?





Take a corner of the sheet each.

What happens when you lift it up together? What happens if you pull it down together?

Why does this happen?

Can you think of uses of this in real life?



Place each item in the water, one at a time.

Which ones float and which ones sink?

Why do some float and some sink?

Can you name something else that would float? Can you name something else that would sink?





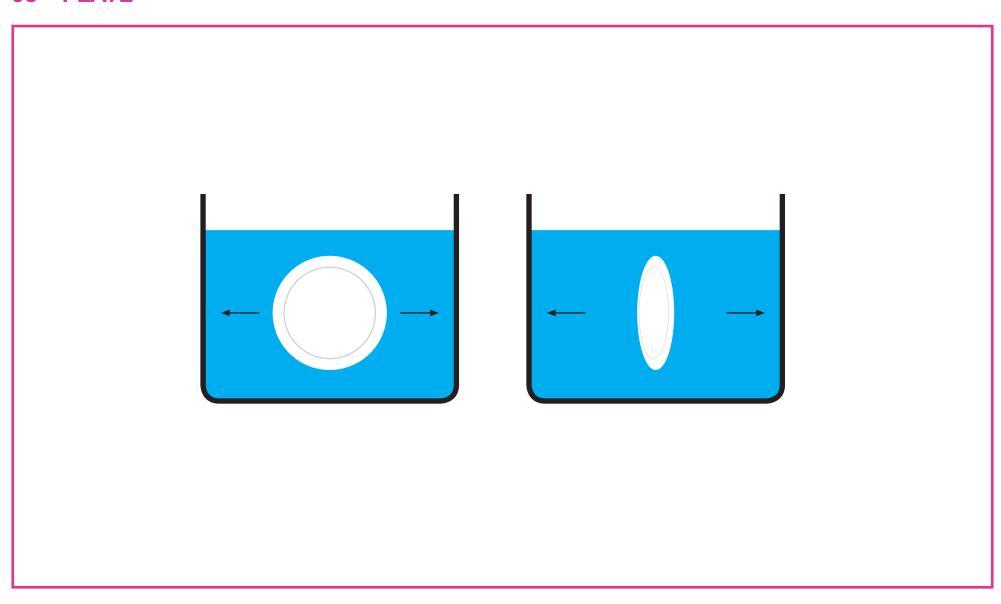
Push the plate along in the water as shown in the diagram.

What differences do you notice?

Why are there differences?

How do fish and boats take advantage of this?

#### YEAR 5 FORCES: **05 – PLATE**







Lift the weight by pushing on the opposite end of the ruler. Repeat, moving the pencil to different positions along the ruler.

When is the weight easier to lift?

Why do you think this is?

Can you think of examples of levers used in everyday life?



# Which is biggest...the Earth, the Sun or the Moon? Which is the smallest?

Look at the different objects.

If the Earth was the size of a pea, which of these would represent the Sun? What about the Moon?

If the Earth was the size of a pea, how far away from Earth would the Moon and Sun be?



Look at the pictures.

Can you sort them using the headings?

What other natural objects can be found in space?

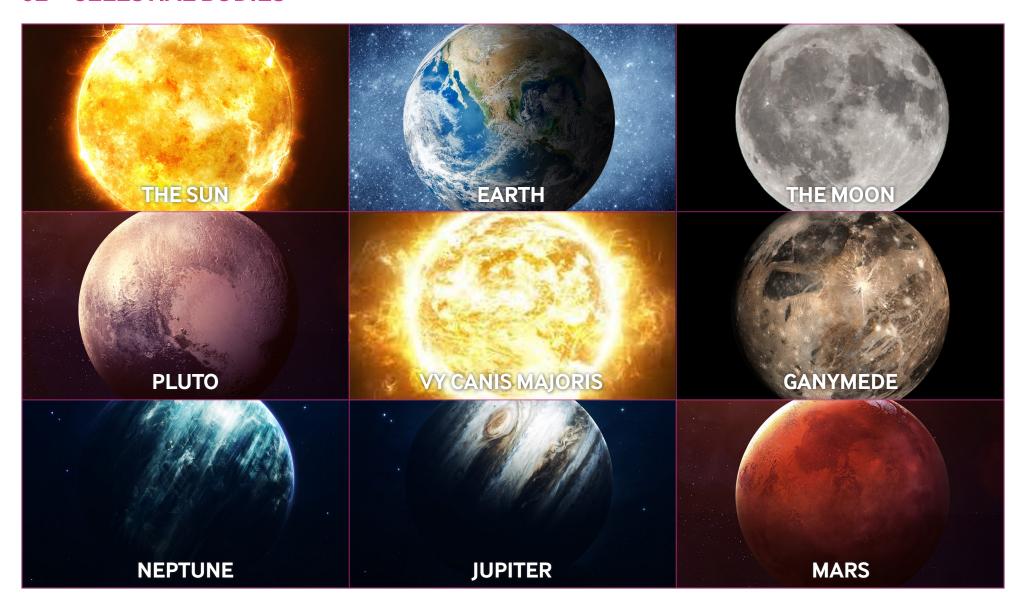
Can you explain the difference between a star, a planet and a Moon?

#### 02 - CELESTIAL BODIES

**PLANET STAR NONE OF** MOON THESE

YEAR 5 EARTH AND SPACE:

#### 02 - CELESTIAL BODIES





Look at the planets.

What is the same about them? What is different?

Can you order them from closest to the Sun to furthest away?

Why do you think there are differences in the planets?

## **MARS**



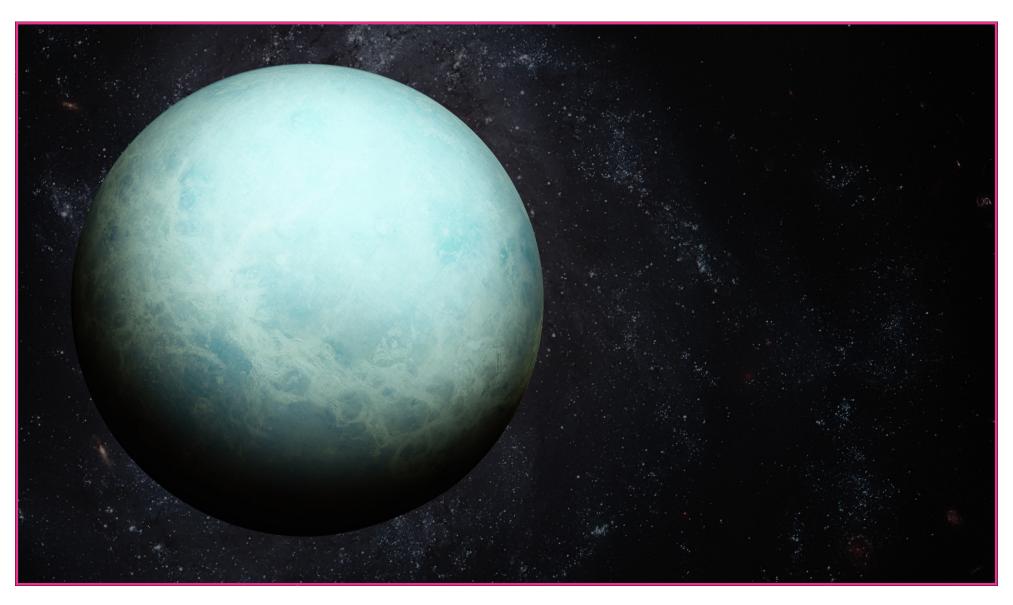
# **JUPITER**



## **EARTH**



## **URANUS**



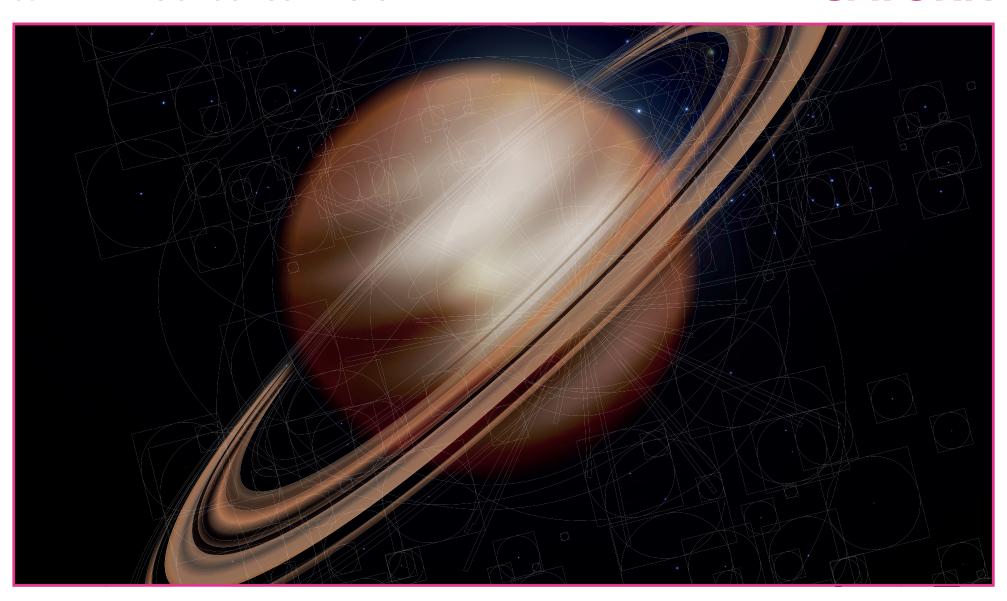
## **VENUS**



## **MERCURY**



## **SATURN**



## **NEPTUNE**



#### 04 - ORBITS, THE SUN AND EARTH



Choose two objects to represent the Sun and Earth.

Which of these move in the solar system?

Use the models to show the movement.

Why do we have day and night?

#### 05 – ORBITS, EARTH AND THE MOON



Choose two objects to represent the Moon and Earth.

Which of these move in the solar system?

Use the models to show the movement.

Why does the Moon appear as different shapes?



Look at the picture.

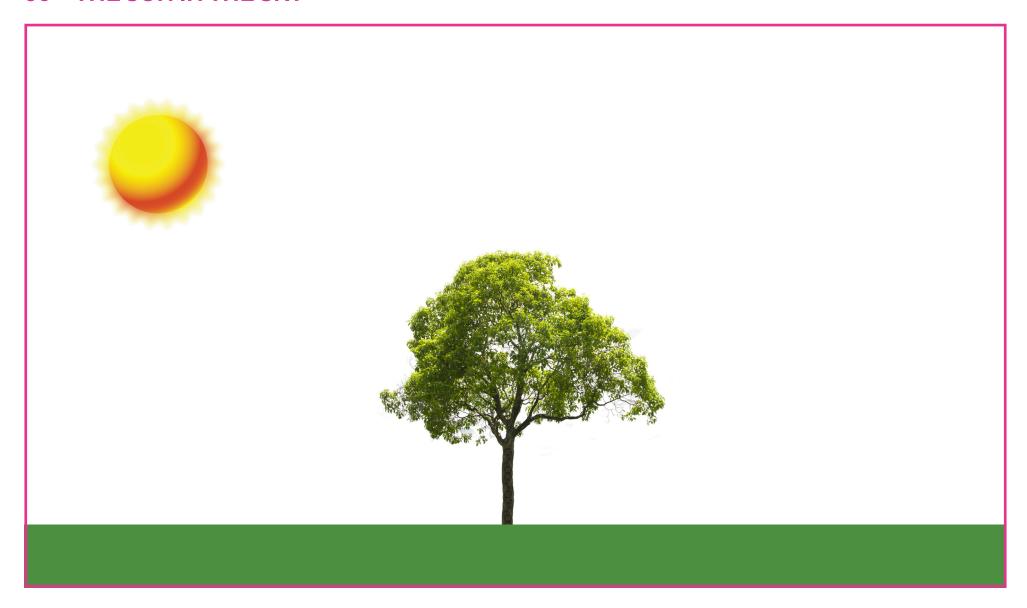
How will the position of the Sun change?

Why does this happen?

How often does this happen?

#### YEAR 5 EARTH AND SPACE:

#### 06-THE SUN IN THE SKY





## 01 – GROUPING MATERIALS

Investigate the materials in this tray.

Can you sort any of the materials into groups?

What headings should be put on the groups? Which words could you use to describe them?

Can you sort them another way? How many different ways can you sort them?

#### YEAR 5 PROPERTIES AND CHANGES OF MATERIALS:

# why& how? PRIMARY SCIENCE TEACHING TRUST

#### 02 - MIXING POWDERS

Observe the sugar, paint powder and flour in the jars.

What will happen to each when mixed with water?

Can you get each solid back out of the water?

How?

03 – SEPARATING MIXTURES



## Look carefully at the mixture.

How could each different item be separated?

What equipment might be needed?

What would you do first? What next? Etc.



#### 04 – USES OF MATERIALS

Look at the materials and the objects.

Can you match each material to the object it would be suitable for?

What makes each material suitable for the object you have chosen?

Which material would NOT be suitable for each object and why?

YEAR 5
PROPERTIES AND CHANGES OF MATERIALS:

#### 04-USES OF MATERIALS



YEAR 5
PROPERTIES AND CHANGES OF MATERIALS:

#### 04 – USES OF MATERIALS

| BOOK | WALL   | RAINCOAT |
|------|--------|----------|
| CAR  | WINDOW | CHAIR    |



#### 05 - CHANGED MATERIALS

Observe each item on the trays.

What has happened to each?

Why has this happened?

Which of these can be changed back again? How?

#### YEAR 5 PROPERTIES AND CHANGES OF MATERIALS:



#### 06 - BUBBLES

Mix the powder and vinegar.

Describe what happens.

Why does this happen?

What is left in the beaker?