Today, we are going to be designing our underwater worlds!

Introduce

(5 mins)

We're going to use the TASC wheel to help us design, make and evaluate our underwater world.

Where do we start on the TASC wheel and why?

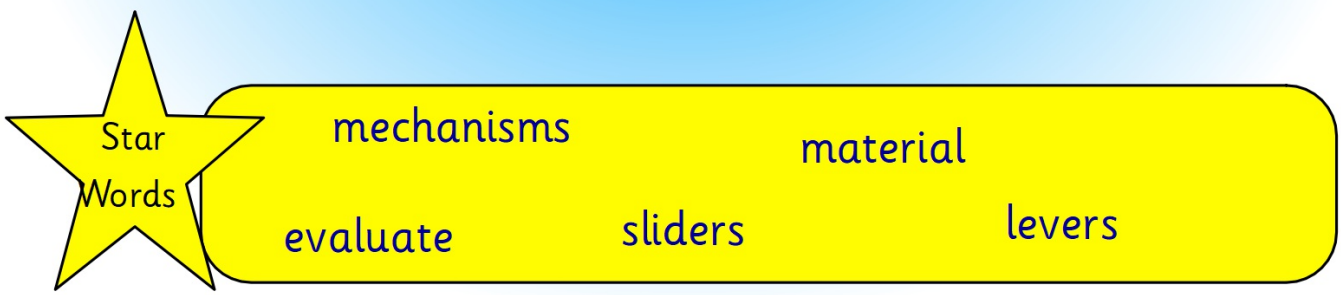
Introduce

(5 mins)

WALT · Explore and use mechanisms, (levers, sliders), and generate, develop, model and communicate ideas through talking, drawing, templates, mock-ups.

Success Criteria:

- Select from and use a range of tools and equipment to perform practical tasks e.g. cutting, shaping and finishing.
- Select from and use a wide range of materials and components, including construction materials, according to their characteristics.
- Explore and use mechanisms e.g. levers and sliders in your product.
- Deepening: evaluate your ideas and product against the design criteria.

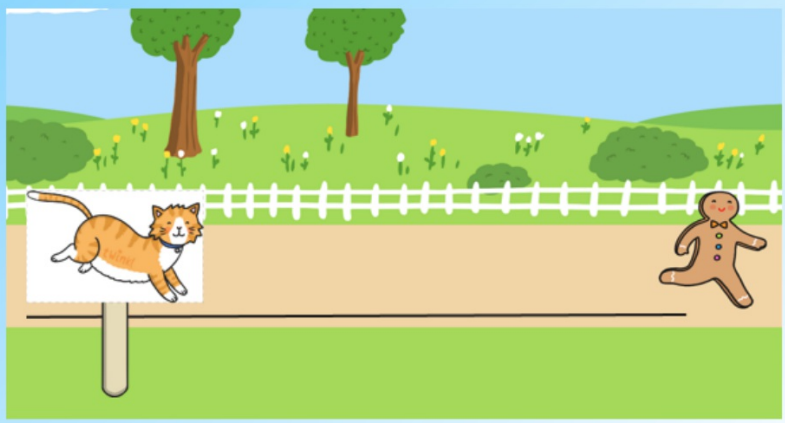


What is a slider?

Let's Recap

A slider mechanism can move an object by sliding it through a slot or gap.

What directions do you think we could move a slider mechanism in?



What is a lever?

Let's Recap

A lever mechanism is made up of a strong bar / beam attached to a **pivot point**. By putting force onto one end of the beam, the other end moves.

Lever - a bar which turns around a point/pivot.

Pivot – a point about which a lever turns.

Can you think of any real life examples of levers?

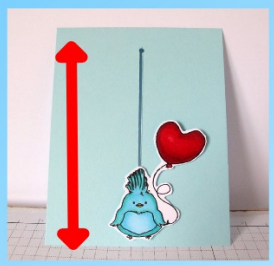
What direction of movement can levers and sliders hav

Let's Recap

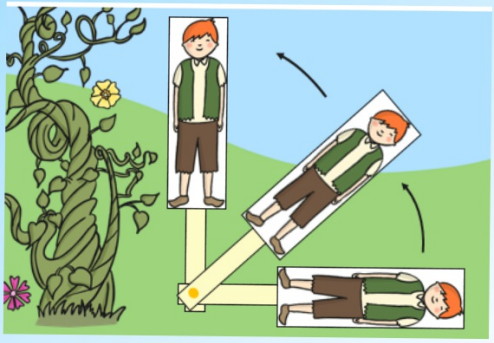
A **slider** mechanism can move in 2 ways.

Left and right

Up and Down



A **lever** mechanism creates a more circular movement.



Practise and consider

What do I need to include in an underwater world?

You have 2 mins to discuss and feedback!

How could you incorporate a lever and a slider into this?

Practise and consider

You need to design your underwater world first before you can create them.

We will think about...

what tools and skills you need

what materials to use

what the underwater world will look like

Design Criteria:

Your underwater world needs:

- Levers and sliders.
- To have appealing, underwater colours.
- made of soft, fabric material
- To be decorated in an appealing way for yourself.
- To include underwater features e.g. underwater animals, seaweed, coral etc.

What details will you want to add to your underwater world?
What type of habitat will it have?
What will you use a lever and slider for?

Have a go at designing 2 underwater worlds.

(Don't worry about levers and sliders YET!)

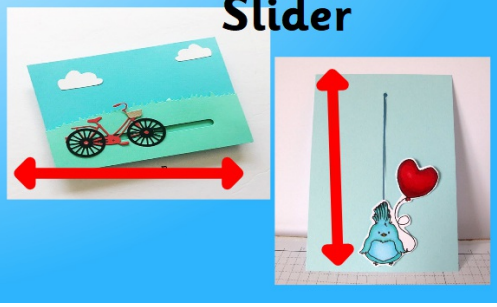
Draw what your underwater world will look like!

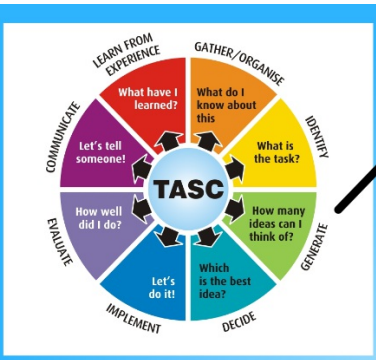
On your design, include arrows to show where the **lever** and **slider** will be, and the direction of movement.

Remember!

Lever

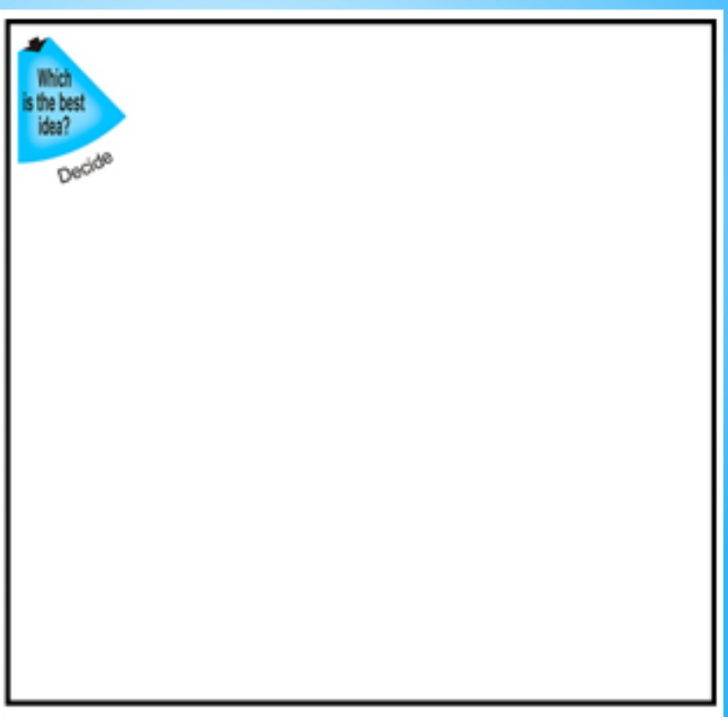
Slider





Generate:

What materials could we use to make the parts of our underwater world?



Decide: What materials will you use.

Deepening

felt

coloured card

pipe cleaners

cotton wool

wool

pom poms

The materials I will need :

Gather and organise

Deepening

What tools will you need? *(Think, pair, share)*

scissors

glue

The tools I will need :

Reflection

Does your design meet the design criteria?

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Share your design with a partner!