DESIGN AND TECHNOLOGY

Wednesday 21st October 2020

Question 1.

Sound is caused by _____.

a) ear drum

b) volume

c) vibrations

Question 2.

The pitch of a sound tells us _____

a) how low or high a sound is

b) how loud or quiet a sound is

c) how big or small a sound is

Question 3.

Which sound has the higher pitch?

a) Bird's chirping

b) Dog's bark



Bird's chirping



Dog's Bark

Question 4.

For an object to create sound it must _____

a) produce heat

b) vibrate

c) be touching your ear

Question 5.

Sound is a form of energy.

a) true

b) false

Question 6.

Identify the action that produces sound in this object.

a) plucking strings

b) blowing air

c) hitting the strings



WALT: Plan and design a method of blocking sound

S2S: I can

- Generate ideas considering the purposes for which I am designing
- Select an idea to form my own plan and design
- Create a labelled drawing to show specific features

TASC Wheel



Gather/Organise

What do I know about this? Where have I met this before? What information do I have? How much do I understand? What questions can I ask?

How do we hear sounds?



Here is a method we could use to block sound.

Ear defenders.



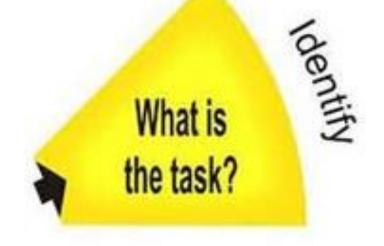






• Would this be a good idea for Sam?

Identify What is the task? What are my goals? What are the obstacles? What do I need to know? What do I need to do this?



Plan and make a set of ear defenders to block out sound to help Sam.

Let's brainstorm...

Generate

How many ideas

can I think

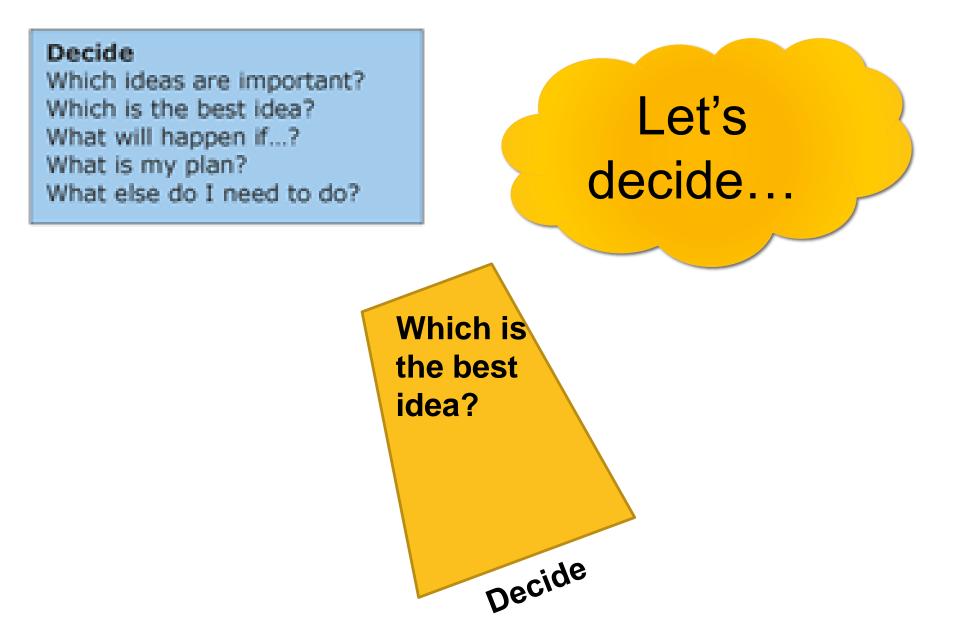
of?

How many ideas can I find? Who can help me? Where can I find out more? What do other people think? Is there another way?

Generate

Let's generate ideas: What could we use to make ear defenders to help Sam?

- What shape will they be?
- What material should we use?
- How big should they be?
- Should we fill them with anything?
- What?
- How will we attach the material?
- What will they look like?



Let's decide which idea is best.

From our class brainstorm, you will need to plan your own ear defenders. You will need to decide...

- Size and shape of ear defenders.
- Material for the outside of the ear defenders.
- What will the ear muff be filled with?
- How will I secure the material to the ear defender?
- What will my ear defenders look like?

Planning template

- Size and shape of ear defenders.
- Material for the outside of the ear defenders.
- What will the ear muff be filled with?
- How will I secure the material to the ear defender?
- What will my ear defenders look like?

Create a labelled drawing.

 Using your plans, draw your own ear defenders for Sam. Label each feature.