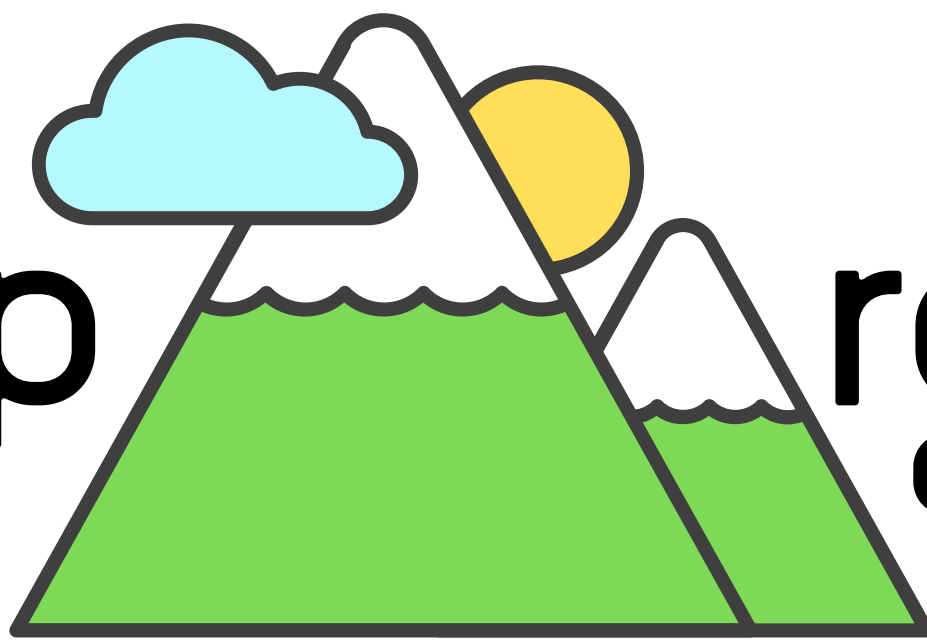




Sheep

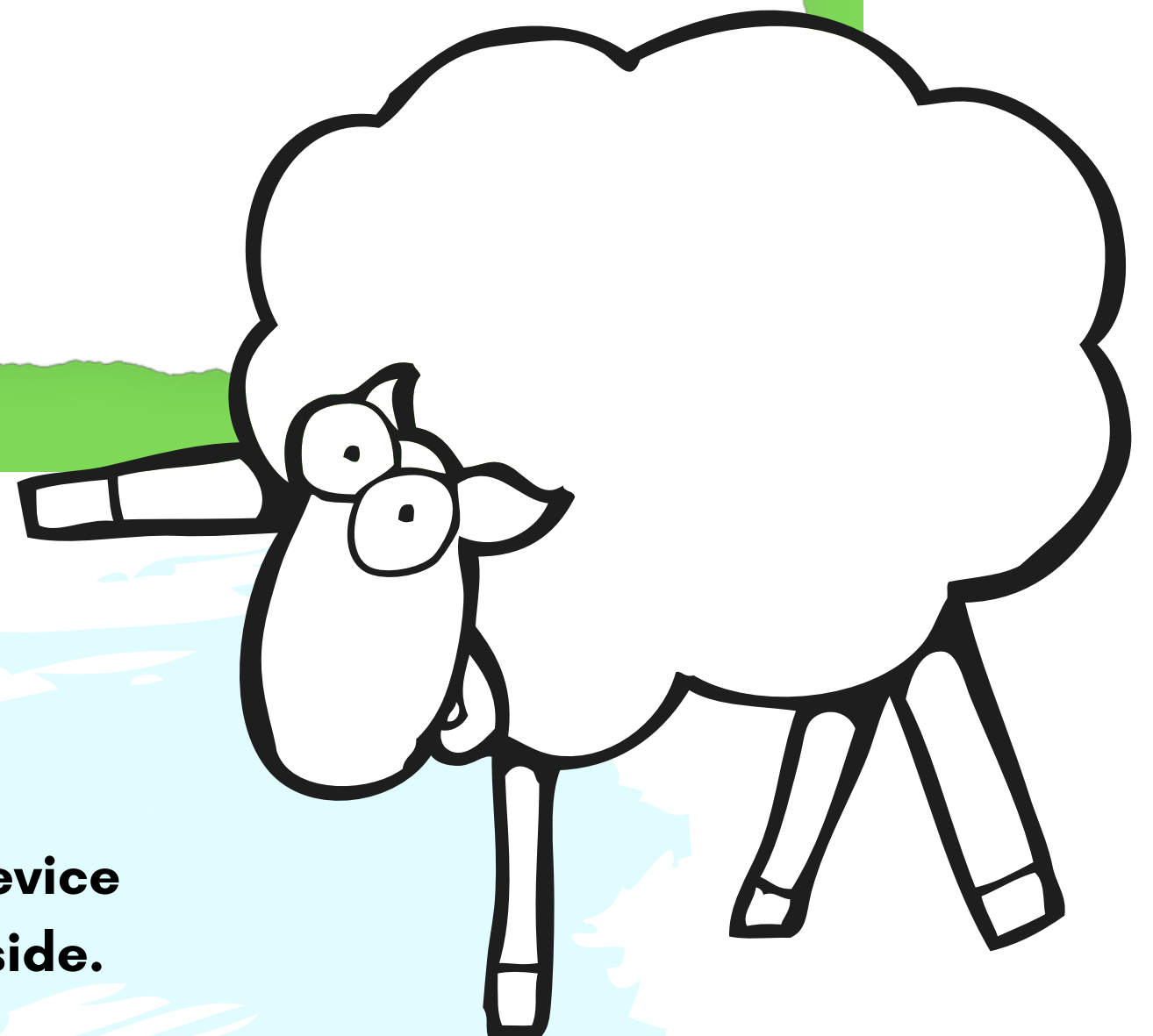


rescue challenge

Mrs Wool was grazing her sheep on the side of Hightop Mountain when all of a sudden there was a loud noise. She spun around and saw an enormous dog barking at her sheep. She tried to shoo it away but the dog wouldn't move, it just started barking louder and louder.

The sheep were very frightened and one was so scared that it jumped off the mountain edge. Unfortunately, when the poor sheep landed on the grass below it broke it's leg.

Can you help Mrs Wool rescue her sheep?



..... Your challenge

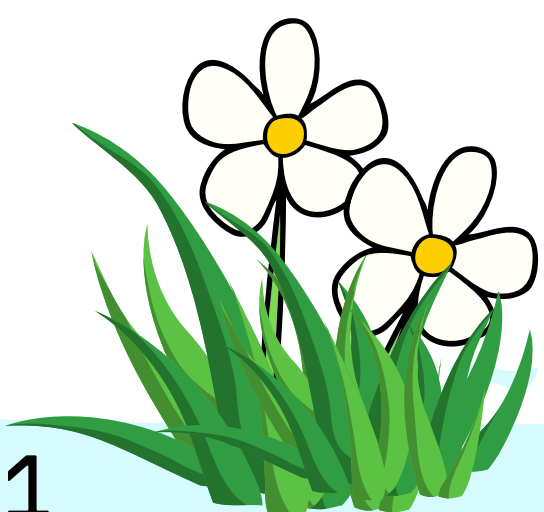
Using the materials provided, design and build a device that can rescue an injured sheep from a mountain side.

Things to think about

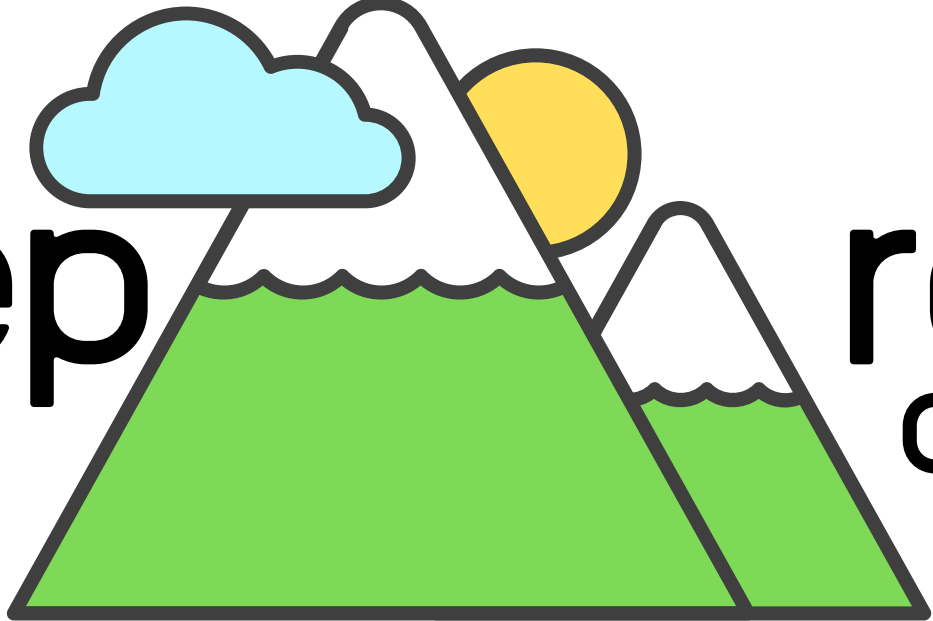
How will your device hold the sheep so that it doesn't fall out?

How strong will your device need to be?

How will your device get the sheep back to safety?



Sheep rescue challenge



Make a plan

Draw your design in the space opposite. You will use this as your plan when you make your device.



Test your ideas

Gather your materials together and build your device.

Are there any changes that you need to make?

Once you are happy with your device you will need to test it out.

Did your device work? Can it rescue a sheep from a mountain side?

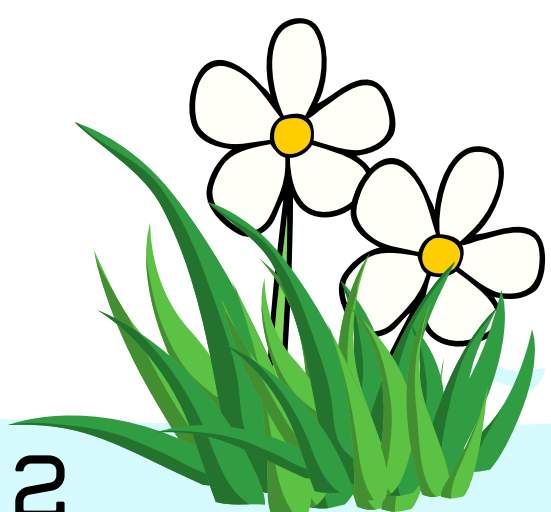
Share your ideas

Present your device to the rest of the group and demonstrate how it works. Explain the reasons for your design and talk about any changes that you needed to make.

If you were to do this activity again what would you do differently?

How could you make your sheep rescue device better?

Discuss





Background information

In the UK sheep farmers have their herds frightened or attacked by dogs an average of seven times a year but, in some areas it is as much as one hundred. 'Sheep worrying' as it is called can cause sheep to die of fright or be crushed to death as the sheep huddle together to protect themselves from the dog. Sheep worrying is a criminal offence where the dog owner can be prosecuted.

About the activity

This activity will enable children to design, build and evaluate a device to rescue a sheep. During the process they will need to consider the merits of using a variety of materials, consider weight, pulleys, and balance. There will be ample opportunity for problem solving and creative thinking.

Advance preparations

Ensure all of the materials are ready so that they can be given out when needed.

If using the sheep template print and prepare it before the start of the activity.

Equipment and materials

Stringing materials- examples to include are laces, elastic, string, yarn, ribbon . There should be a variety.

Sticking materials- examples to include are glue, plasticine and sticky tape. There should be a choice.

Other materials to make the device- examples to include are paper, card, lolly sticks, straws, paperclips, pipe cleaners, tin foil, cling film. A range of options need to be available.

cotton wool balls -these will be sheep that need rescuing.

scissors

pencils

table or chair- that can be used as a mountain.

Instructions

Introduce the activity by reading out the story.

Ask the children what they think Mrs Wool should do. What would they do if they were in the same situation?

Read out the challenge and explain to the children that they will be making a piece of equipment that can rescue a sheep that has fallen down a mountain side.

Hand out the materials and activity sheets.

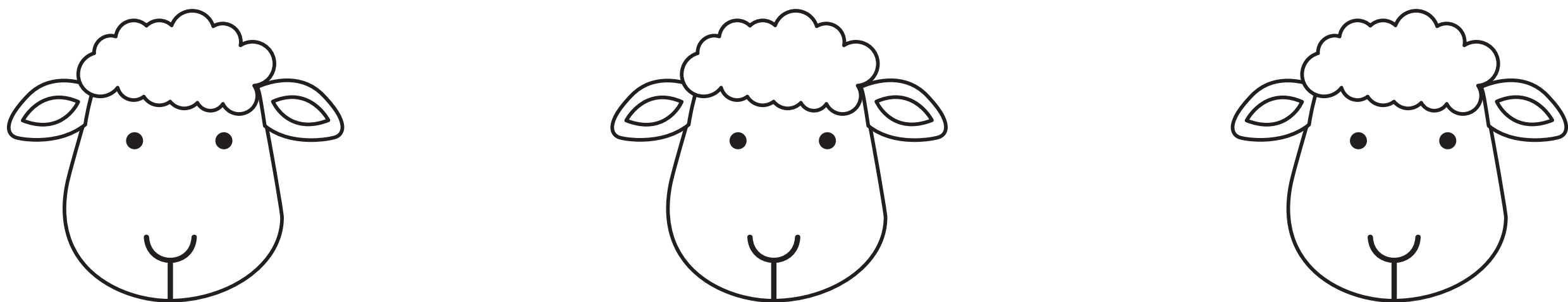
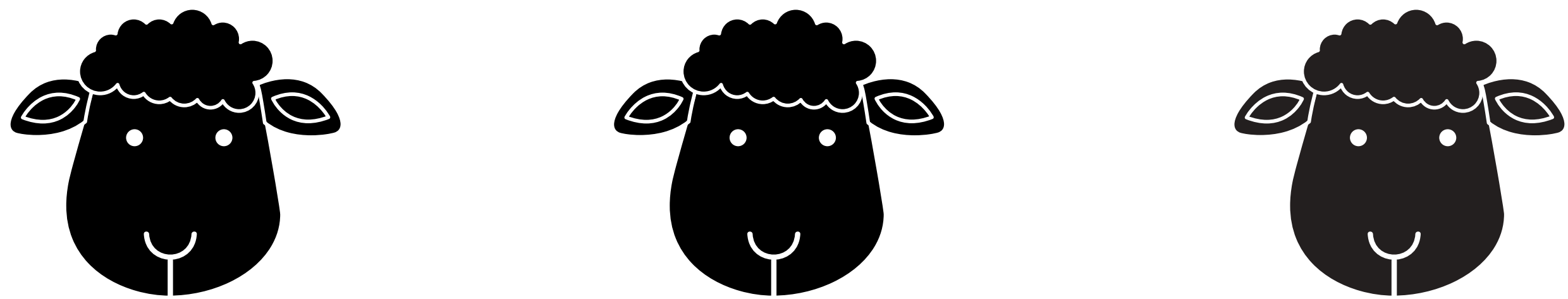
Support the children to make their devices, allowing them to learn from their errors and make changes as necessary. Enable them to test their devices out, this can be done by using it to retrieve a sheep from the floor and getting it onto the top of a table or chair.

Encourage the children to present their device to the rest of the group. Prompt them to talk about the reasons for their design, what worked well and not so well along with explaining any changes they needed to make during the building process.

Encourage the group to discuss what they would do differently if they were to repeat the activity and how they could make their devices even better.



sheep template



Instructions

Simply cut around the sheep faces and stick them onto cotton wool balls.

