Build an Ear

Sections

Joey Scouts | Cub Scouts | Scouts | Venturer Scouts | Rover Scouts

Scouts VICTORIA

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Challenge Areas

COMMUNITY | CREATIVE | OUTDOOR | PERSONAL GROWTH

Scout Method Elements

COMMUNITY INVOLVEMENT | LEARNING BY DOING | NATURE AND THE OUTDOORS | PROMISE AND LAW | PERSONAL PROGRESSION | PATROL SYSTEM

SYMBOLIC FRAMEWORK | YOUTH LEADING, ADULTS SUPPORTING

SPICES Growth Areas

CHARACTER | EMOTIONAL | INTELLECTUAL | PHYSICAL | SOCIAL | SPIRITUAL

The Adventure

Build a human ear and learn about how we hear sound, see if you can demonstrate how sound waves move through the structures of our ear allowing us to hear.

Plan

1. Investigate sound and how it travels. Can you come up with a creative way to visualise how sound travels? Can you feel sound? Try placing your hand on a speaker playing loud music and observing what you feel.
2. Investigate the human ear, focussing on structure and function. What parts make up our ears? What is the role of each part in helping us hear? How does sound pass through each part of the ear?
3. Come up with a plan for your ear model. What elements of the ear will you incorporate and how? There are many sources of inspiration on the internet including Make a Model Ear, Anatomy Project, and Make a Working Model of An Ear.
4. Collect the materials required for the activity. Communicate with your patrol and leaders if you need to bring items from home.
5. Read the safety requirements and discuss with you leaders/adults supervisors what supervision and safety requirements might be needed.

Do

1. Work as a patrol to build your model ear! Younger sections may want to focus on building an eardrum and seeing how sound can make it vibrate. Older sections may want to challenge themselves and attempt to convert sound waves to an electrical signal.
2. Remember to be creative! There are lots of things around your home and Scout Hall that could represent different parts of the ear. Remember, your model can be much bigger than a real ear.
3. Your goal is to make a functional model. You should be able to show how a sound wave moves through the different parts of the ear allowing us to hear. How will you demonstrate to your unit your model in action?
4. As a unit, take turns sharing your ear models. Discuss what each patrol did well, as well as ways they could improve their ear model. Demonstrate the process of hearing a sound.

Review

1. What have you learnt about sound during this activity? How do our ears work to hear sound?
2. Could you demonstrate hearing a sound with your ear model? How might you improve your ear model for next time?
3. If you were to do this activity again, what would you do the same? What would you do differently? What did you enjoy most about this activity?
4. Each part of our ears has a special role to play in helping us hear. What parts of the ear did you include in your model? What does each of these parts do to help you hear?

Safety

- The safety hazards and protection needed will be highly dependent on the resources you choose to use during this challenge card to build your model. For example, using scissors will introduce a sharps hazard. Talk to your leaders and patrol about what safety issues might arise during this activity and systems or supervision you need to set up to keep safe.

Variations

- A larger program can be built using other ‘How Do We Hear’ or sound wave challenge cards.
- Now that you’ve made a functional model, can you make a model that resembles the structures of the ear? Set yourself a creative challenge to make an ear model with arts and craft supplies that looks as much like an ear as possible.