



# Observational Drawing

## Learning Objectives:

- To know that the heart has many chambers and valves to keep the blood pumping around the body.

## Science and D/T Skills:

- Observing and making an accurate observational drawing.

## Resources:

- Drawing paper (2 sheets per child) and pencils
- The Elizabeth Garrett Anderson PowerPoint
- Skills Development Workshop Template
- **ART 1.** on the STEM Sisters Site: Observational Activities, Drawing Template and PowerPoint

## WHAT YOU SHOULD KNOW BEFORE YOU START

Elizabeth Garrett Anderson was born in 1836, just before Queen Victoria came to the throne. Her father earned enough money to send her to a good school and, inspired by Elizabeth Blackwell (the first American woman doctor) she decided she wanted to become a doctor too.

However, in those days, it was an entirely male profession. She enrolled to study to be a nurse as no doctor's course would accept her and tried to study alongside the men, but they complained about her presence and she was banned from their lessons. The men felt that women simply weren't cut out to be doctors and shouldn't be at the dissections!

She eventually learned French and went to study in Paris where she was permitted to study to be doctor. However, when she came back, the British Medical Register refused to recognise her qualification.

In 1872, Elizabeth founded the New Hospital for Women in London. Elizabeth's sister, Agnes Garrett, another pioneering woman, set up the first interior design business run by women, with her cousin Rhoda Garrett. Together, they designed aspects of the hospital. A hospital founded and designed for women, by women.

By 1876, her story had made a difference and women were allowed to train as doctors.

## WARM UP – observational drawing

Tell the children:

Elizabeth Garrett Anderson was the first woman doctor. One of the main parts of her training was to study anatomy. We are going to practise drawing like doctors in training.

Show *Slide 1* of the Elizabeth Garret Anderson PowerPoint. Give out paper and sketching pencils. Give the children a maximum of five minutes to draw the heart. Tell them there is a time limit.

Ask the children:

- How easy/hard was it to draw that?
- Does your drawing look lifelike?
- Have you drawn in every tube?
- Could someone else recognise the parts of the heart from your drawing?

Tell the children:

When you attend anatomy classes, you need to draw different body structures so that you understand how they work and how to operate on them. Your drawings must be accurate and clear.

(If your class have drawn very sloppy pictures, you may want to stop and have another go here. If you are confident, draw a picture of the heart to show them how to get the shape right and look closely, to add every detail.)

Growing up, Elizabeth Garrett Anderson wanted to be a doctor. As she was a woman in Victorian times, the only job she could have in a hospital, was as a nurse. Women weren't permitted the role of doctor. Elizabeth enrolled on the nursing course but, still wanting to be a doctor, she sneaked into the back of lectures and dissection classes to study what the men were studying. The men objected to her being there! They said that a woman didn't have the stomach to watch dissections and she would have to leave.

Ask:

- What do you think of that rule that said only men could be doctors and only women could be nurses?
- What do you think Elizabeth thought about that rule?
- Do you think being a boy makes you better at watching dissections?
- Would you like to watch a dissection?

Watch:

[https://www.youtube.com/watch?v=yE3Y-XR8Ax4&has\\_verified=1](https://www.youtube.com/watch?v=yE3Y-XR8Ax4&has_verified=1)

(There is an age restriction on this, so you need to sign in to google to view it. It is suitable for Year 5 and 6 if they want to watch it.)

When you have watched it, rewind and stop the video at 2.11. You'll see a frame which shows the heart opened up. Give out more paper and ask the children to try drawing the structures inside the heart. Aim for more detail in this picture. Encourage the children to try to draw it accurately even if they are unsure what the structure is. Spend a little more time on this drawing.

## EXTENSION

Find out what the parts of the heart are called and label the drawing.

## REVIEW

**ALL:** Children can make an accurate observational drawing of the outer features of the heart. They can consider the needs of a hospital bed user.

**MOST:** Children can make an accurate drawing of the dissected heart.

**SOME:** Children can label the parts of the heart.

