

YOU COULD BE AN... ASTRONOMER



This sessions story
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[https://www.youtube.com/
watch?v=9S5klbrsG_8](https://www.youtube.com/watch?v=9S5klbrsG_8)

What did you think of the story?

Astronomers study objects in space. One of the most important things they study are stars! The closest star to Earth is the Sun, but there are millions and billions of stars in our Universe.

If you have ever looked up into the night sky you may have noticed that some stars are grouped together, these are called constellations. A constellation is a bit like a dot-to-dot puzzle. If you join the stars and use lots of imagination, the picture would look like an object, animal, or person.

As long ago as 32,500 years ago, humans have been naming constellation and giving them stories and we are going to do the same.



OPEN-MIND

MOTIVATED

PATIENCE

KEY SKILLS

MAKE YOUR OWN CONSTELLATION TUBE

This activity allows you to see a constellation projected on to your wall!

ASTRONOMER KIT

- Cardboard tubes
- Printed out constellation pattern
- Glue/rubber bands
- Tape
- Scissors
- Pencils
- Thumbtack

STEPS

Constellations at the ready: Print out a constellation pattern or design your own.

Circle time: Draw a circle on paper large enough to cover the top of the cardboard tube. Draw the star constellation on to the circle.

Time to construct: Put the starry circle on top of tube, fold paper down around edge and stick down, or use a rubber band to hold in place.

Make the stars: Use a sharp pencil to poke holes where stars are (get an adult to help you ⚠).

Let's see a constellation! Turn off all the lights in the room and shine a light (can be a torch or a phone light) through the tube to see constellation projected across the wall.

Get creative: If you wanted to get even more creative you could even decorate the tube and think up your own story or research the history the constellation about why your constellation was created!

BUILD YOUR OWN GALAXY

Astronomers also study galaxies. A galaxy is a collection of stars, planets, gas and dust that are all held together by gravity.

ASTRONOMER KIT

- Old CD
- 50g of Play-Doh/blue tac

STEPS

Cut the Play-Doh: Split the PlayDoh into four quarters. Put three of the quarters off to the side for now.

Make the galaxy bulge: Roll the first quarter of Play-Doh into a ball and place it over the hole in the centre of the CD to form the 'bulge' of the galaxy. It should form a dome shape.

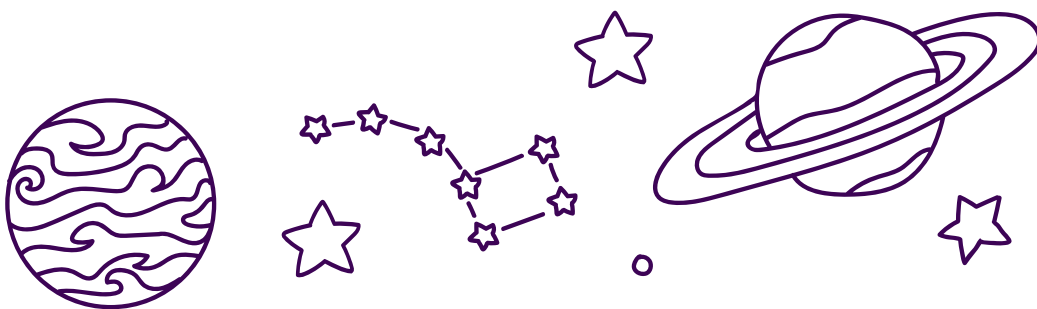
Make the spiral arms: Take the rest of the PlayDoh and roll into one long sausage. Divide this into two and roll long sausage shapes (try to make them both the same length). These two long pieces will be your spiral arms.

Connect the arms to the body: Stick one end of the PlayDoh sausage to the centre of your galaxy bulge then spiral the sausage out in a snail shell shape until meets the edge of the CD. Then take your second piece of Play-doh, and mirror your first spiral arm on the opposite side of the bulge.

Make corrections: Check that both of your spiral arms are winding in the same direction

What are you going to call your galaxy?

If you did the session in the library this is the at-home activity



HOW DID YOU FIND THE ACTIVITIES? DO YOU THINK YOU USED THE THREE SKILLS?

Congratulations! You have successfully completed your astronomer training and are ready to explore stars and galaxies. You've also read some great books along the way, do you want to read some more? **Turn over to find out more...**

