

SCIENCE, TECHNOLOGY, ENGINEERING AND MATHS

SHOOT THE MOON

THESE ACTIVITIES FOLLOW ON FROM THE SHOOT THE MOON WORKSHOP THAT YOU HAVE TAKEN PART IN AT DUMFRIES HOUSE STEM CENTRE. USING WHAT YOU LEARNED ABOUT THE LIFE IN SPACE AND FORCES, CAN YOU COMPLETE THE ACTIVITIES BELOW?

ACTIVITY 1: STAR STORIES

People have been looking at the night sky for a very long time. When they were looking at the stars, they started to use them to create shapes—a bit like a dot-to-dot. In the stars they saw bears and dogs and even eagles! People have used these shapes as inspiration as inspiration for stories. Now is your chance to tell your own story.

1. As a class, look at some of the constellations in the sky—[Orion](#), [Ursa Major](#) and [Canis Major](#) have particularly nice shapes. What shapes can pupils see? Do they see animals, or people, or objects?
2. Tell pupils stories based on the constellations—Orion is a hunter, who is hunting the bull Taurus with his dog, Canis Major. Ursa Major and Ursa Minor are a bear and her cub—throughout the night they chase each in a circle, playing a game. What other adventures do pupils think the characters might get up to?
3. Give pupils a large piece of paper, some beads (perhaps 5-10, but experiment with numbers) and some pencils. Get pupils to scatter their beads across their paper—these are the stars in the sky. Use pencils to join up the beads to make a shape. What do the pupils see in their night sky? They don't have to use all the stars to create their constellation!
4. When pupils have decided what their constellation represents, they can start to build stories around their shapes. Why is the duck they've drawn in the night sky? Did it fly too high? Is it on an adventure?
5. Once they've got the beginnings of their story, give learners the chance to finish off their pictures. They might need coloured pencils and pens, and maybe some stickers to show the stars in their constellation.

ACTIVITY 2: DAY AND NIGHT

The day and night cycle helps us to structure our day—we wake in the morning, when the sun is rising, and go to sleep when the sun sets and it gets dark. However, lots of other animals behave differently. Research which animals like to be out and about during the day, and which like to come out only at night. What about plants? How do flowers behave at night?

Birds do something interesting at dawn—investigate The Dawn Chorus. What do you think they're singing about? What would you sing at dawn?

SCIENCE, TECHNOLOGY, ENGINEERING AND MATHS USEFUL RESOURCES

VINEGAR AND BICARBONATE OF SODA ROCKET:

youtube.com/watch?v=jjU1IAgRcQg

BUILD YOUR OWN ROCKET, POWERED BY A CHEMICAL REACTION!

#COSMICCLASSROOM:

youtube.com/watch?v=mRuBvf-Qrno

ASTRONAUT TIM PEAKE GIVES YOU A LESSON FROM THE INTERNATIONAL SPACE STATION

ISS LIVE:

blogs.esa.int/promisse/watch-iss-live/

SEE AND HEAR WHAT'S GOING ON IN THE INTERNATIONAL SPACE STATION—LIVE!

