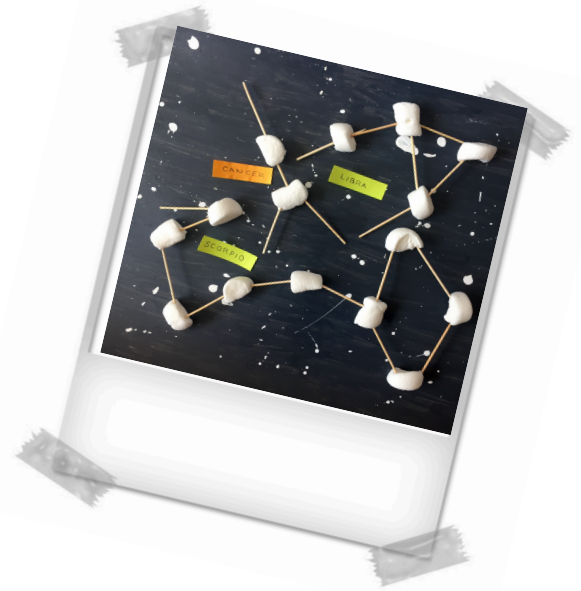


MARSHMALLOW CONSTELLATIONS

How do astronomers identify the different stars in the sky?



CURRICULUM LINKS

SCIENCE:

Light (year 3 & year 6)

Earth & Space (year 5)

MATHS:

Estimation

Geometry

ICT:

Using search technologies

Using apps

YOU WILL NEED

- Cocktail sticks
- Marshmallows (or modelling clay)
- Pictures of the zodiac constellations
- Black paper
- Stargazing apps (e.g. *Star Walk* or *Zodiac*)

STEM VOCABULARY



- **Astronomer** – an expert or student in astronomy.
- **Astronomy** – a branch of science that studies the universe and the objects within it.
- **Constellation** - a group of stars forming a recognisable pattern. Some of the most famous are Orion, Ursa Major, Ursa Minor, Pegasus and the zodiac constellations.
- **Ecliptic** - this is the circular path in the celestial sphere representing the sun's path over the course of a year.
- **Star** - an object in the night sky that emits its own light.
- **Zodiac** - a band of the sky along which the sun, moon and planets move. It is divided into 12 constellations or signs.

HOW TO DO IT

- 1) Spend time using astronomy apps such as the *Star Walk* app. Use them to explore the night sky, identifying in particular the zodiac constellations.
 - 2) Explain that we will be recreating the signs of the zodiac using cocktail sticks and marshmallows.
 - 3) It's time to put the children's engineering skills to the test as they create the zodiac signs. Encourage them to observe the geometry of each constellation.
- EXTENSION:** Estimate how many marshmallows and cocktail sticks they will need for each constellation.
- 4) Display the constellations against a backdrop of black paper and photograph.



WHAT ARE WE LEARNING?

Modern astronomers divide the sky into 88 constellations. The sun, moon and planets travel along the ecliptic path. The 13 constellations they pass through are the stars of the zodiac. You may have heard of astrology, in which the zodiac signs are used to predict horoscopes. Astrology is different to astronomy and is not considered to be scientific.

INVESTIGATE



Now research and recreate some of the other major constellations.



Find out more about the job of an astronomer.