



**GET
ADVENTUROUS**



3 HOURS +



**PREPARATION
NEEDED**

A SKY FULL OF STARS PROJECT



AIM

Our sky is full of stars, each one is millions of miles away yet shining bright for us to see on Earth. Take on a project learning more about these stars and their constellations, before heading out on a star walk to admire their beauty.

WHAT YOU'LL NEED

- Sky Full of Stars: True or False Sheet
- Constellations Activity Sheet
- My Star Walk Reflections Activity Sheet
- Box Full of Stars Activity (or similar)

GET ADVENTUROUS: A SKY FULL OF STARS PROJECT

THEME: EXPLORING THE WORLD AROUND ME



LEADER PREPARATION

A leader will need to look at all the activities within the project and ensure you have the appropriate resources, depending on the activities chosen. A suitable location for the star walk will need to be found beforehand.



GETTING INTO THE ACTIVITY

Week 1 – A Sky Full of Stars & Their Amazing Facts (30 minutes): Use the 'True or False' activity to explore some of the fascinating facts about the stars in our sky. Then challenge children to work in pairs / small groups to find out some facts of their own and feed these back to the group. Access to the internet or books will be required.

Week 2 – Constellations (30 minutes): Use the constellations sheet to learn about constellation, by playing a game of pairs or by hiding the constellations around the room and having a treasure/star hunt. Then give children cones and chalk (or similar) and encourage them to re-create constellations from the sheet, using the floor as the sky. Children could then design a constellation of their own.

Week 3 – Build a Star Box (30 minutes): Take on the '**A Box Full of Stars' Activity Card** (Spring 2022 – <https://boys-brigade.org.uk/a-box-full-of-stars-activity-card>) or a similar constellation project. This should help children to build on their star and constellation knowledge and give them something they can take on their star walk to help find constellations.

Week 4 – Star Walk (60 minutes): Head out as a group and take a walk around your local area, regularly looking up at the sky. What stars and constellations can you find? Can you find more stars in certain parts of your walk (i.e. areas with less street lights etc). Make sure to wrap up warm and take torches with you.

Week 5 – My Star Walk Reflections (30 minutes): Use the activity sheet to allow children to reflect on their star walk, detailing what they noticed along the way and a chance to draw some constellations that they saw. After children have created their reports, give each child an opportunity to share what they have drawn/written to the rest of the group.



JUNIORS PROJECT AWARDS

The Project Awards aim to encourage Juniors to take on an activity for a longer period, something that will require at least 3 hours of activity. A Project Award can be gained in each of the three years in the Juniors age group and the activity can be selected from any of the six Activity Areas within the programme.



KEEPING EVERYONE SAFE

All activity should be risk assessed, in particular the star walk. Consider which location / route is the safest and ensure children and dress and equipped appropriately for the activity.

A SKY FULL OF STARS: TRUE OR FALSE

Nominate one end of the room as 'True' and the other end as 'False'. Read out a statement and ask children to stand where they think is correct. Let children discuss why they think this and then share the answer and the additional information with the group.

There are an estimated 300-400 billion stars in the Milky Way, our galaxy – most of which we can't see – TRUE

It's said that there are more stars in the sky than grains of sand on all the beaches on earth. If you look beyond our galaxy (our little part of the universe) then there are hundreds of billions more!

On a clear night in the UK, you can see 2,000+ stars – TRUE

If you are very lucky then seeing 2,000+ stars is possible, however due to most of us living in areas of light pollution, we tend to see far less.

The Sun is the largest star in the Milky Way – FALSE

It's just the closest one to us. There are many stars which are far bigger. One of the largest known stars in our galaxy is called 'UY Scuti' and is about 1,700 times the size of our Sun.

The North Star is the brightest star in the sky – FALSE

It's actually about the 50th brightest, however it is really easy to find due to its position in the sky, which makes it a good star for navigation.

Bigger stars tend to live for longer than smaller stars – FALSE

It's actually the other way around. The bigger the star is, the shorter its life, with smaller stars surviving for billions of years. The reason behind this tends to be that bigger stars burn their fuel supply quicker. Some of the bigger stars may only burn for 'just' a few million years.

Some stars you can see in the sky are nearly 20 quadrillion miles away – TRUE

On a good night, you can see about 19,000,000,000,000,000 miles, easily. That's 19 quadrillion miles, the approximate distance to the bright star Deneb in Cygnus.

Our closest star, the Sun, is massive. It can fit roughly 1 million earths inside it – TRUE

If you think Earth is big, then think again. 1 million Earths can fit inside the Sun, which can't help but make us feel very small!

All stars shine as either a white or yellow colour, depending on their size – FALSE

Stars are different colours depending on their temperature. The hottest stars are blue, followed by white, yellow, orange, red, and the coolest stars are brown. The way we see stars is altered by our atmosphere and the way our eyes pick up on colours.

The light from the North Star takes about 100 years to travel to earth – FALSE

It's actually over 400 years! Because of how far away the star is the light started its journey to Earth many years ago. When you look at a star (or any object in space) you are seeing how it looked in the past. Even the Sun, our closest star, appears as it was 8.5 minutes ago.



CANCER



URSA MINOR



SCORPIUS



LEO



ORION



CAPRICORNUS



PEGASUS



LIBRA



CASSIOPEIA

MY STAR WALK REFLECTIONS

Use this sheet to reflect on what you saw and learnt on your star walk. You can use a mixture of words and drawings.

My Name:



Star Walk - Where & When?

Draw 3 Constellations you saw:



What was the weather like on the night?

Where was the best place to see stars on the walk?

What was the best part of the star walk?



What else did you see and do on your star walk?

