STARGAZING SESSION 2

SEEING STARS!

Seeing stars!

NAME OF STUDENT:

SEEING STARS SESSION

THIS SESSION WE WANT TO FIND OUT WHAT YOU CAN SEE FROM YOUR WINDOW!

What is a star?

Stars are giant collections of super hot gas made up mostly of hydrogen and helium. Stars get hot by burning hydrogen into helium, in a process called nuclear fusion. This is what makes them so hot and bright. Our Sun is a star.

Today we are going to help Ziggy the Space Captain look for stars and constellations.

A **constellation** is a group of stars forming a recognisable pattern.

What to do:

- Keep an eye on the weather forecast and try to pick a night with few clouds.
- Go outside/look outside your window and try to spot some of the constellations in the sky.
- If you can go with your parents/carer - go outside trying to avoid large buildings - preferably on a clear night, avoiding bright lights.
- If you are looking out of your window make sure all the lights in the room are turned off.
- It may take up to 20 minutes for your eyes to adjust perfectly, so don't worry if at first you are struggling to see the stars.
- Make a journal or write in your passport what you see!

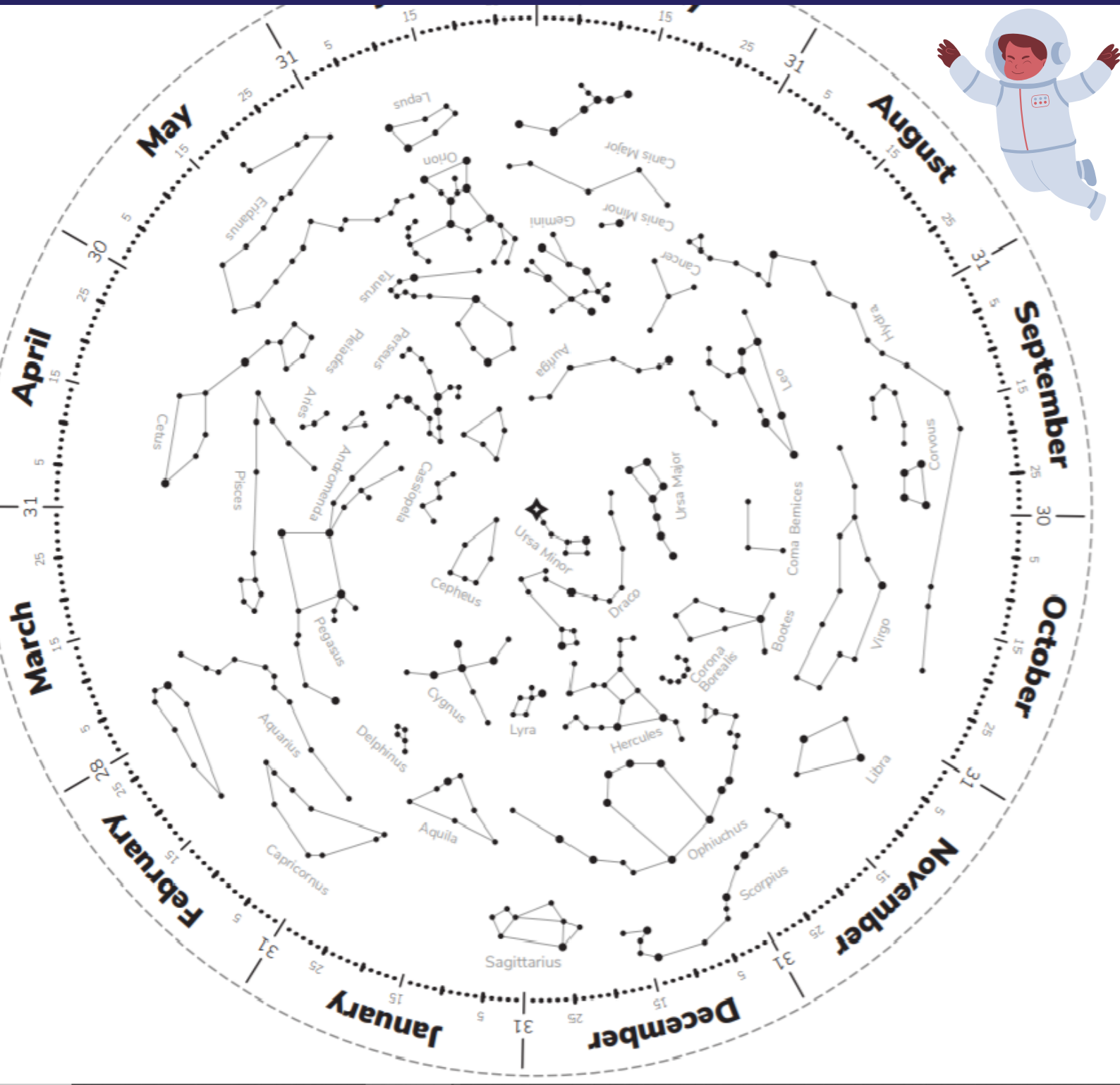
TASK 1:

EITHER PUT YOUR HANDS TOGETHER (FORE-FINGERS AND THUMBS) TO MAKE A VIEWING HOLE OR FIND AN OLD CARDBOARD TOILET ROLL.

LOOKING THROUGH THE HOLE COUNT HOW MANY STARS YOU CAN SEE.

TASK 2:

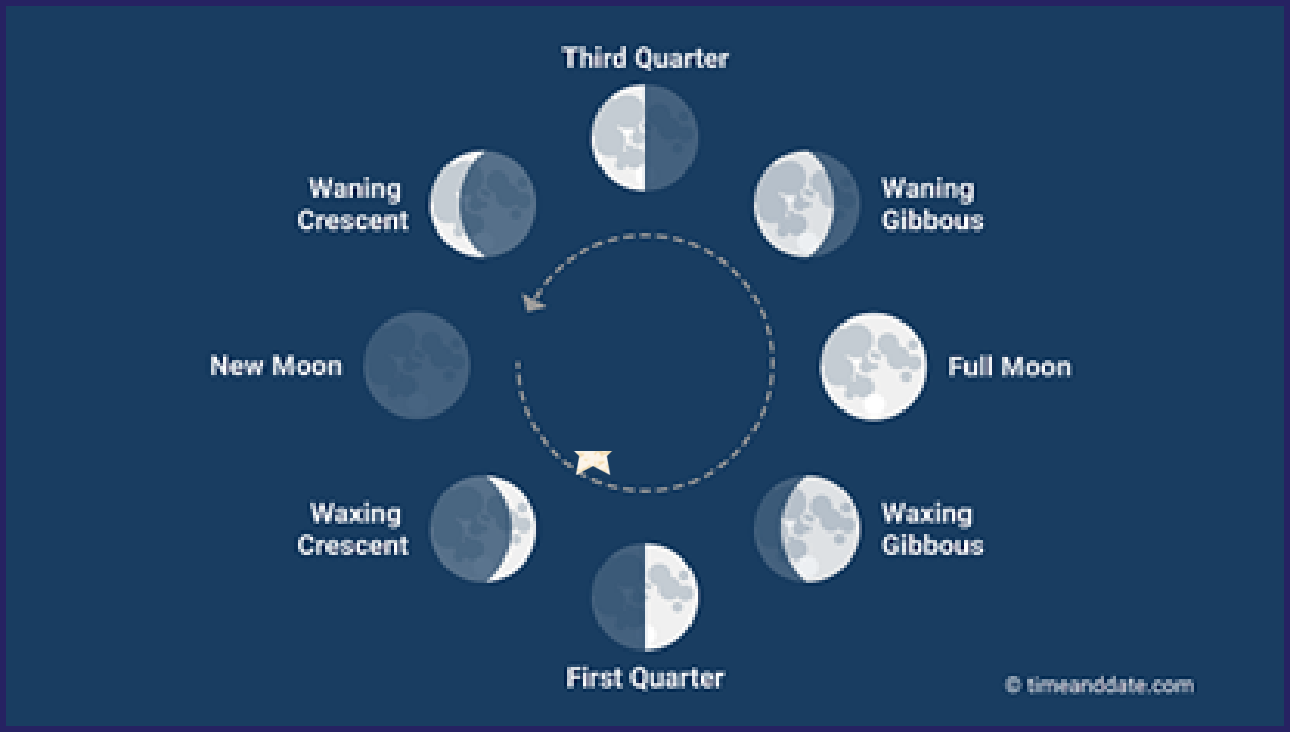
LOOK AT THE CONSTELLATION MAP - CAN YOU SPOT ANY OF THEM WHEN LOOKING AT THE CORRECT MONTH? TIP: THE STARS SHOULD MAKE SHAPES LIKE THE ONES BELOW.



TASK 3:
WHILST YOU'RE THERE - TAKE A LOOK AT THE MOON! CAN YOU GUESS WHAT STAGE IN THE CYCLE THE MOON IS IN BY LOOKING AT ITS SHAPE?

WE CAN SEE MORE OR LESS OF THE MOON DEPENDING ON ITS POSITION TO EARTH AND THE SUN. THE MOON DOESN'T CREATE ITS OWN LIGHT - THE LIGHT WE SEE FROM THE MOON IS OUR SUN'S LIGHT BOUNCING OF IT FOR US TO SEE!

WHAT DOES IT LOOK LIKE TONIGHT?



FUN FACTS:

STARS TWINKLE BECAUSE OF MOVEMENT IN THE EARTH'S ATMOSPHERE.

THE SMALLER THEY ARE THE LONGER THEY LIVE.

THE NEAREST STAR TO EARTH IS PROXIMA CENTAURI. IT IS STILL 40,208,000,000,000 KM AWAY.

THE SUN IS AROUND 4.5 BILLION YEARS OLD.