

# WORLD FAMOUS TELESCOPES

an activity pack for curious kids

Puzzles
Colouring pages
Plot telescopes on a world map
Design a message to extraterrestrials

#### Welcome to this telescopethemed activity pack from Pale Blue Marbles!

This supplements my blog post that takes you on <u>a journey</u> around the globe learning about 8 of the world's most famous telescopes and some of the incredible things they are used to study.

If you haven't read the post yet I recommend going through it with your child and watching some of the videos to give them a taste of some of the amazing things astronomers look at with these telescopes and to familiarise them with the names of the telescopes, where they are and what they look like.

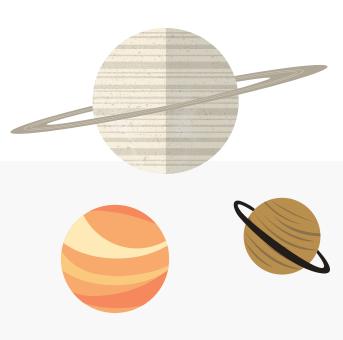
# There is also a <u>Google Earth journey</u> <u>to follow and explore</u>.

I have included activities at different levels – choose the ones appropriate for your child.

#### **Cultivate curiosity and enjoy!**

If you like the activities, please spread the word: comment on the blog posts or on the Facebook page and invite your friends to like and subscribe!

You can also follow me on <u>Twitter</u>, <u>Instagram</u> and <u>Pinterest</u> for more activity ideas and astrobiology.



#### WHAT'S INSIDE

Two telescope word searches
Two mirror mazes
Mark telescopes on a map
Design a message to aliens
Six telescope colouring pages



#### Telescope word search: tricky

These 14 words are all connected with world-famous telescopes or their objects of study. How many can you find? They might be vertical, horizontal, diagonal or backward. Good luck!

A I C G I K I J R F K Y P R M K I J B G A R F K W W R A D W G P S U B Y T N O N X U A U R K G P D D I M R D V V H Q N L R W T V S I S A D N D ARECIBOHMFEEHEPYSQBNMMGNF KNABLLERDOJECTRBUOMT IHNRU DOTYPSDSTDMHEETIROWECFYEB WITXWTJHDCNCFJMVIBNLRDBQE JINKCGXRMOENBAUEVSBENLEXM J C E O B H F V S M T C Z V L G X C T S A O X P Y SCMTUCWIKDVFDUNMHNYCSSJJW KCVLFYGPVYKDKBCJZOXOJBPJI MQHOWNEMJXJQZAMDFIOPFJYTP HZJWALADBTYBMDXGDYOIFSXQH Q B U T I P G Y D I Q X N V H X E K J O L O P W W RIUPEPFIGHKIADFXMNWCRIYGX LRCKSNOPARAYTIMQXTUAWNKYL EYDYERWALPEVHYNXQEJNGEUKS EBAWEBFPVQTNNURRPNJACQUEW YGTTHLJEIUCEEYZDRABRBVWU NKSLQAOWSTGVBKHXOLYIYTHHH PAGFOZZRIBECUSRAFPRAQWE NHLFBAHQTAQSXBGAOOE STLAS UTLCQRJLJKWQFBIBDXPGDUCYX HLRODXEPEGSSIIALMEIYFRLWT LIADBJIJDHNDZFJYYSIDGBJRU

ARECIBO
ASTEROID
BLAZAR
DARK ENERGY
JODRELL BANK
SALT
TECHNOSIGNATURE

EXOPLANET
GRAN TELESCOPIO CANARIAS
INOUYE
ELT
KECK
SETI
VLA

#### Telescope word search: easy

These 12 words are all connected with world-famous telescopes or their objects of study. How many can you find? They might be vertical, horizontal, diagonal or backward. Good luck!

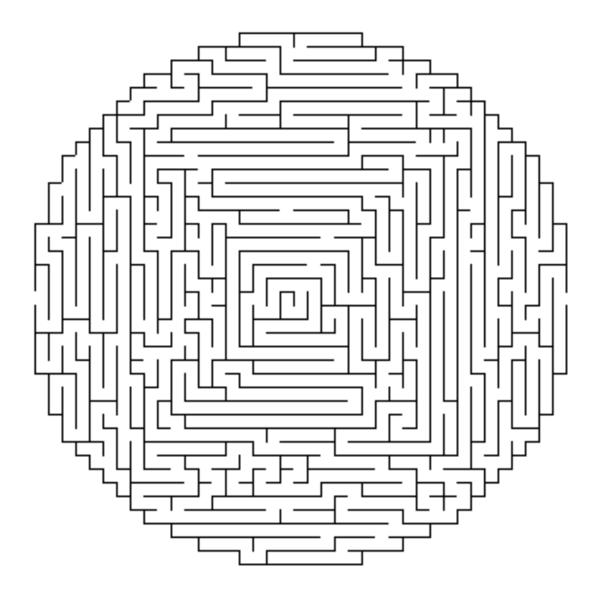
TVBDIREDRE ELTTIB EE NGAOEKTO EY SO UARZES SMBELCAAVS OVTSKPLRME LSKTHVODVL ARECI BOX RTLAS BJS T CY MWUFB E

ARECIBO
BLAZAR
EXOPLANET
SALT
SOLAR
TELESCOPE

ASTEROID ELT KECK SETI STAR VLA

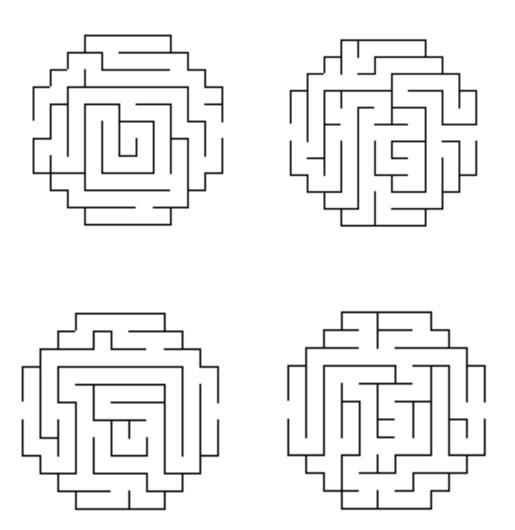
## Mirror maze: tricky

Find your way to the centre of this mega maze. Does it remind you of anything? Many telescopes have circular, curved mirrors to focus the light they collect. The bigger the mirror the further and dimmer the objects they can see.



## **Mirror Maze: easy**

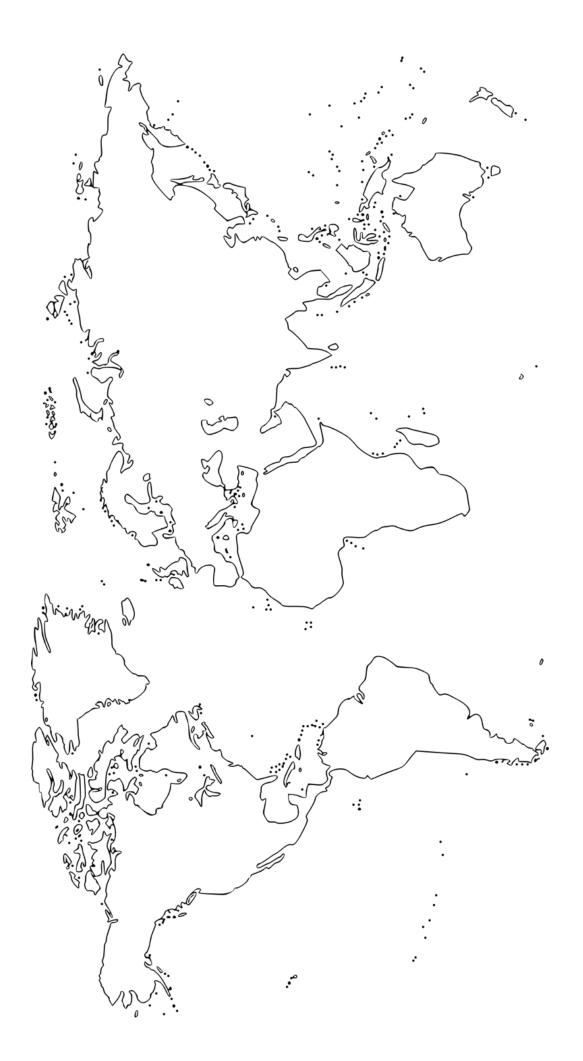
Find your way to the centre of these little mazes. Do they remind you of anything? Many telescopes have circular, curved mirrors to focus the light they collect. The bigger the mirror the further and dimmer the objects they can see. The largest telescopes have to use many smaller mirrors as a single mirror would bend under its own weight.



#### **Telescope map**

For the best images of the Universe you need dark skies and a thin (or no) atmosphere. Ground-based observatories are often found in high, isolated places – like on top of mountains or even dormant volcanoes. Use the Google Earth journey to find out where these telescopes are then mark them on the map below and colour it in. There is also a larger map on the next page. You can also label the countries and other landmarks or find out where other telescopes are found.

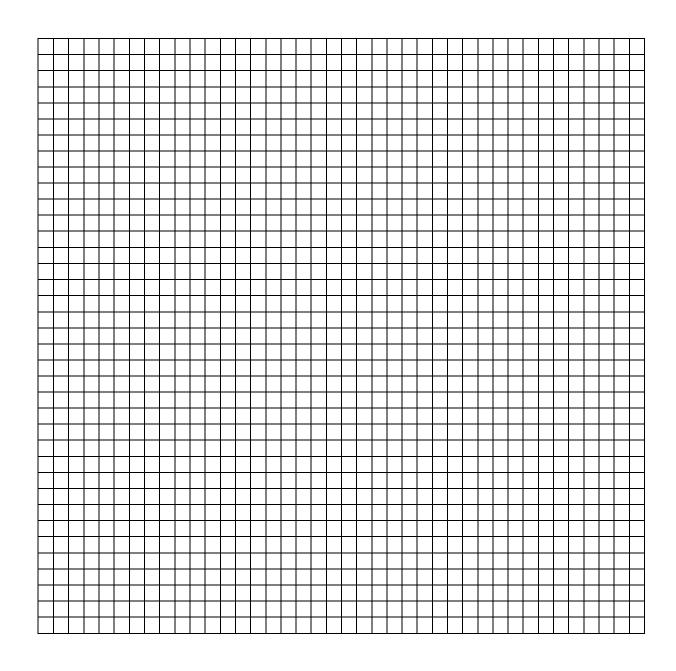




# Design a message to send to extraterrestrials

In 1973 a message was sent by the Arecibo telescope towards a nearby cluster of stars. It included information about the numbers 1-10, DNA, humans, the Arecibo telescope and our solar system. A pictorial representation of the message is shown to the right. Design your own message using the grid below. What would you say to life on another planet?





#### Colour me in!

