



# Exoplanet Design

Create a Unique World!

## Classroom Activity

### Material List:

- Large piece of paper
- Coloured pens/pencils
- Access to internet or books
- Other craft resources, including rulers, scissors, coloured card and more

### Outline

Learn as much as you can about exoplanets and then combine your imaginations to come up with a unique exoplanet all your own. Tell your classmates about the planet you created and learn about theirs.

Then consider what kind of life could exist on these planets, how they might adapt to live in extreme conditions. Finally design a life form for one of the planets, making a poster explaining how its features help it survive.

## Procedure:

1

Look at the example travel posters for real exoplanets at <https://exoplanets.nasa.gov/alien-worlds/exoplanet-travel-bureau/> and explore the surface of some of the planets.

2

Work in your group to decide on the conditions for your exoplanet, what's the temperature like? How's the weather? What does the surface look like? How does the atmosphere and size affect it? Write a description of the planet

Online Observatory: [onlineobservatory.eu](http://onlineobservatory.eu)

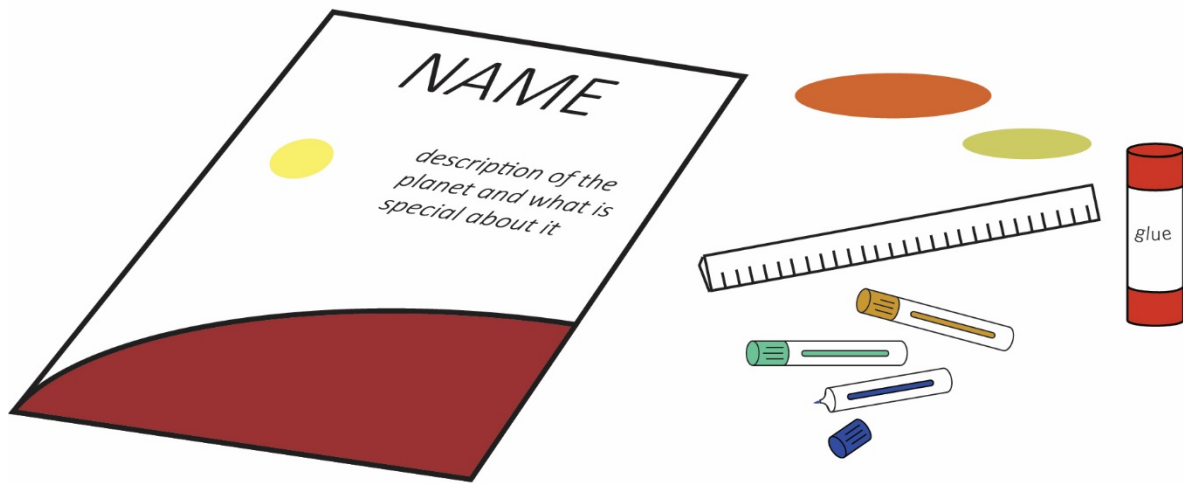
The online observatory collaboration consists of the following partners:

Baldone Observatory, Brorfelde Observatory, Cardiff University, Harestua Solar Observatory, Helsinki Observatory



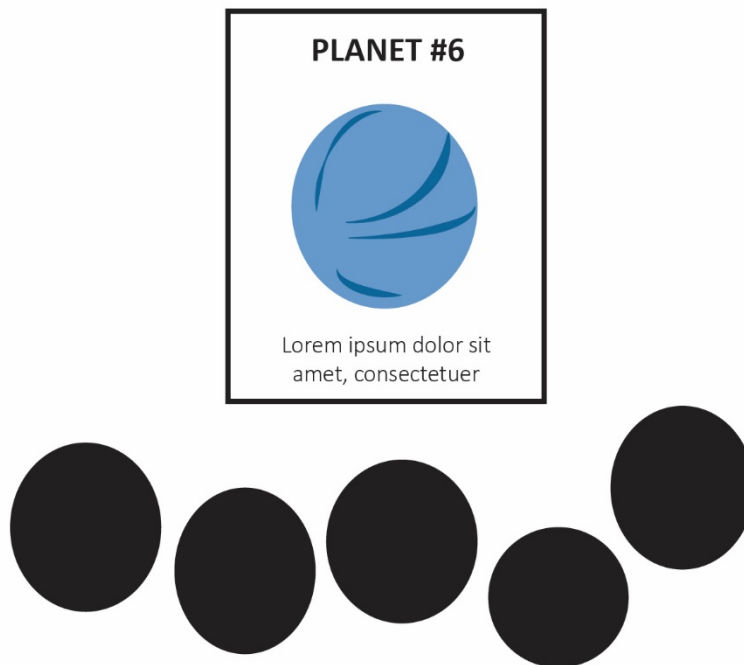
3

Design a travel poster to advertise your exoplanet to the rest of the class, give your planet a name and be as creative as possible.



4

Present your planet to others.



5

Listen to the teacher introducing the next stage of the activity and then switch planets with another group.



6

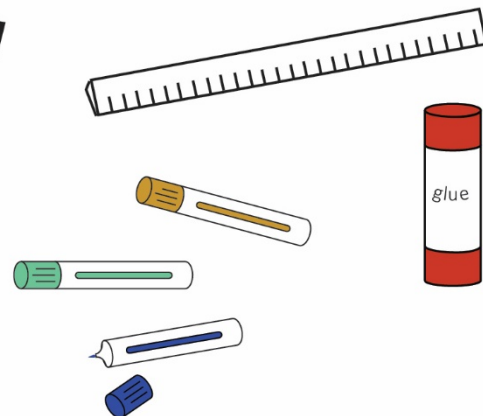
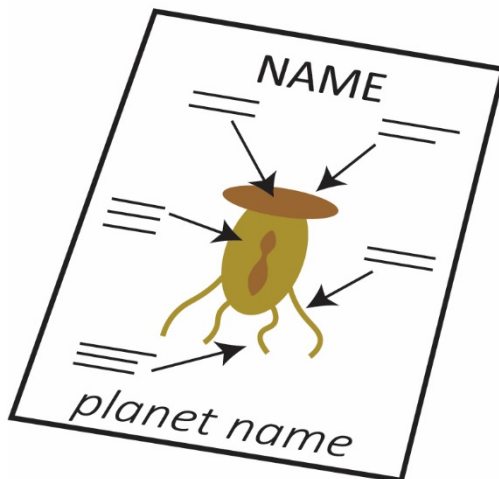
Research how creatures on Earth have adapted and evolved over time, to survive extreme conditions. Especially conditions similar to that of your exoplanet.

<https://www.bbc.com/bitesize/topics/zvhhvcw>



7

With your new exoplanet, design a form of life to live there. Consider how it has adapted to its conditions. Create a new poster, drawing your exoplanet inhabitant and labelling the features that help it to survive.



8

Present your poster once more, explaining how the 'alien' has adapted and justify the choices you made.