

ACTIVITY 5.1 TOWN PLANNER

From the Chapter Five of the Mission Mars Diary
marsdiary.org/activities/town-planner

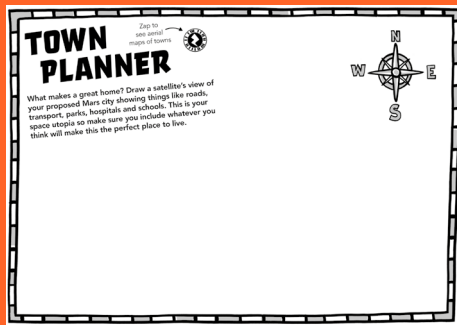
LEARNING LEVEL

KS2, P5-7, Y4-6

CURRICULUM LINKS & DIFFERENTIATION IDEAS

View detailed curriculum links for England, Scotland, Northern Ireland and Wales in the Teacher Toolkit, plus differentiation ideas for your region and year level.

marsdiary.org/resources/#teacher-toolkit



Resources Required

- Smartphone or device for Zap code (optional – see Useful Links)
- Online maps of the local area
- Images of the surface of Mars

Background to this Activity

This activity provides students with the opportunity to practice their mapping and drawing skills, by imagining what their city on Mars would look like if seen from a satellite. This could be likened to the photos taken by drone that we now regularly see.

Running the Activity

Explain to the children that they are going to design their own Martian city. Look at some examples of bird's eye view photographs of towns and cities containing recognisable features (e.g. Houses of Parliament, Blackpool Tower) to ensure the children understand the concept. Use online maps to display local places known to the children, identifying some of the human and physical features in their own environment. Discuss with the children the placement of human features, such as homes, schools, farms, etc. Encourage the children to ask why they have been placed there.

Look at some images of the surface of Mars, focusing on the physical features of the planet: atmosphere, terrain, water, climate etc. What impact would these have on building a settlement?

Questions for the Class

- What are the basic needs humans would need fulfilled in the settlement?
- How can you include these within the plan?
- What sort of infrastructure would be required to allow people to live there?
- How does the physical geography of Mars impact on

the design of the city?

- How does this settlement compare with cities on Earth? What are their similarities and differences?
-

Additional Challenges / Extension Activities

Write about the map to explain its features:

- Lower: Why is that feature included? How will it help the settlement?
- Upper: What happens in that place? How is the settlement going to develop in the future?

Write a science fiction story set in the city

Ideas for Differentiation

Lower:

Overlay a grid on the map. Use four figure grid references to locate features on the map.

Upper:

Overlay a grid on the map. Use six figure grid references to locate features on the map.

Add physical geographical features to the map as well as human geography. Research the Martian environment to ensure they are accurate.

Create a key, using symbols to explain the features on the map.

Useful Links

Zappar Content: Download or view the Zappar content for this activity on its webpage (URL to the left) or access it via the Zap.

Images of the surface of Mars taken by Mars Express:
http://www.esa.int/spaceinimages/Missions/Mars_Express

Your Mission **MARS DIARY**

ACTIVITY 5.1 TOWN PLANNER

From the Chapter Five of the Mission Mars Diary

marsdiary.org/activities/town-planner

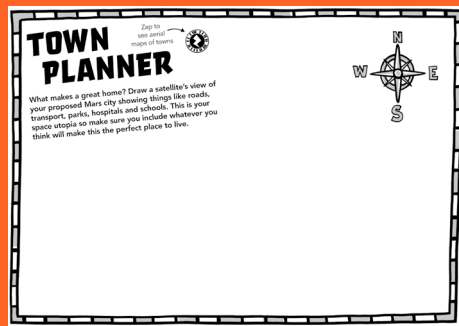
LEARNING LEVEL

KS2, P5-7, Y4-6

CURRICULUM LINKS & DIFFERENTIATION IDEAS

View detailed curriculum links for England, Scotland, Northern Ireland and Wales in the Teacher Toolkit, plus differentiation ideas for your region and year level.

marsdiary.org/resources/#teacher-toolkit



ZAP! Students can independently access multimedia resources using the Zappar mobile/tablet app. See Zappar instructions at the link below and note that the mobile/tablet will need to be on a WIFI connection:
marsdiary.org/resources/#teacher-toolkit

If you don't have access to the internet in the classroom, all Zap code content is available to download on the activity's web page (see link to the left) as a PowerPoint presentation or as bundles of images.



Find more great space-themed STEM resources at
<https://www.stem.org.uk/esero>