

ACTIVITY 6.2 THE JOURNEY HOME

From Chapter 6 of the Principia Space Diary http://principiaspacediary.org/ activities/the-journey-home

LEARNING LEVEL

KS1, KS2, P1-5

CURRICULUM LINKS & DIFFERENTIATION IDEAS

View detailed curriculum links for England, Scotland, Northern Ireland and Wales, plus differentiation ideas for your region and year level. principiaspacediary.org/curriculum-planner/



Resources Required

- Internet access (Google Maps)
- Atlases
- A3 paper
- Rulers
- Interactive whiteboard (optional)

Background to this Activity

On Saturday 18 June 2016, the Soyuz capsule carrying Tim Peake and his colleagues landed in the Kazakhstan desert, in a region known as the Kazakh Steppe. This is vast and unpopulated area, so it's a safe place to land a spacecraft.

Following the landing, the astronauts were given initial medical checks, and were then transported to the Cosmodrome in Baikonur for more extension health monitoring. Tim then travelled to the Aerospace Centre in Cologne, Germany, where he spent his first night back on Earth.

Running the Activity

This activity asks students to consider where they might choose to land when coming back from the ISS. Start by showing your Space Apprentices footage of Tim's landing. This footage from the ESA shows re-entry, as well as the Recovery Crew helping Tim from the Soyuz and making sure he's safe and well: http://www.esa.int/esatv/Videos/2016/06/Soyuz_TMA-19M_landing.

Discuss why the Kazakh Steppe is a good place for the Soyuz to land. Ask students to consider terrain and safety. They can then choose their own landing site and drawn their imagined journey home.

Younger students could draw more conceptual maps of how they would return home, considering the modes of transport they might use to get there. Use this activity to discuss scale and more advanced geography with older students.

If your Space Apprentices have completed Activity 3.2 Draw Your Own ISS, suggest to children that they include a map key on their drawing. They might like to use colours or patterns to represent different types of terrain, such as mountains, deserts or bodies of water.

Questions for the Class

- How far is it from Kazakhstan to your school? Use an atlas to measure the distance. This creates a great opportunity to discuss scale.
- Can students find out why Kazakhstan was chosen for the landing place?
- Discuss with students which countries Tim would have flown over to reach Cologne and how they may have looked from the plane.
- Would there have been any natural features, like mountains, that the plane would have needed to avoid? (This is known as the relief of the land).
- If the plane took a different route, how might the scenery change?
- What if Tim landed in December instead of June, would the terrain look any different?

Extensions & Digital Resources

ZAP! Using the Zappar app, students can watch the video of Tim Peake's landing. See Zappar instructions at the link below and note that the mobile/tablet will need to be connected to the internet: http://principiaspacediary.org/using-zap-codes-to-strengthen-digital-literacy/