

ACTIVITY 0.3 SPACE DINNER

From the Pre-launch Chapter of the Principia Space Diary
<http://principiaspacediary.org/activities/space-dinner>

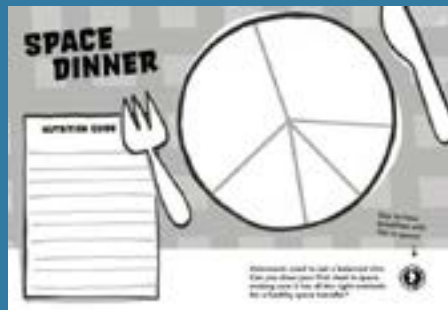
LEARNING LEVEL

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

- Coloured pens
- Eatwell Plates via NHS website
- For younger children: Shopping basket and food
- For older children: Fact sheet on food types

Background to this Activity

Astronauts need to consume sufficient energy (calories) in space to work effectively and maintain good health. Calcium and vitamin D are vital with their beneficial effect on bones, as a low-gravity environment can lead to poor bone health. Many astronauts simply do not consume enough calories because of lack of time and their demanding work schedules.

Fluid shifts mean that astronauts get a 'stuffy head' and they feel like they have a cold. This means that food tastes blander in space than on Earth.

Meals are usually dehydrated and fresh fruit is a luxury.

The foods need to be easily and safely stored and must not create crumbs that could get into the special equipment on board the ISS. Dried strawberries from breakfast cereals, coffee granules, coated chocolate, foil carton drinks are all examples of foods that have been in space. NASA's fact sheet Food For Space covers food preparation in space and space-friendly foods: <https://www.nasa.gov/audience/formedia/presskits/spacefood/factsheets.html>

Check out the Great British Space Dinner competition by the UK Space Agency (<https://principia.org.uk/activity/the-great-british-space-dinner/>), which invited children from across the UK to help Tim choose some special menus that were prepared by celebrity chef Heston Blumenthal.

Running the Activity

Download the Eatwell Plate from the NHS website:

<http://www.nhs.uk/Livewell/Goodfood/Documents/The-Eatwell-Guide-2016.pdf>

Use one of the methods below to set up the exercise:

Set up the classroom as a shop with different food (for each group) in different parts of the room. Students can "shop" for items to include in their space dinner and draw what they choose.

Use the Eatwell Plate to choose and design a meal incorporating each food group.

As above, plus ask them to link their meal to each of the seven food groups. Use the resources provided with the Extension exercise for this activity (available on the website).

Extensions & Digital Resources

To challenge students further download Extension activities for this lesson from <http://principiaspacediary.org/activities/space-dinner>. These have been developed by teacher Claire Loizos.

ZAP! In this activity, students can use the Zappar app on a mobile or tablet device to watch a video of Tim Peake making scrambled eggs on the ISS by. 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/>