

## ACTIVITY 3.2

### DRAW YOUR OWN ISS

From Chapter 3 of the Principia Space Diary

<http://principiaspacediary.org/activities/draw-your-own-iss>

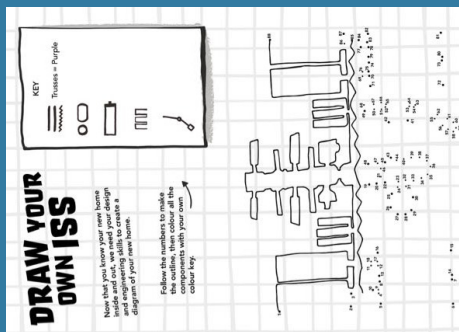
## LEARNING LEVEL

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/](http://principiaspacediary.org/curriculum-planner/)



## Resources required

- Coloured pencils or markers
- Examples of different keys used on maps and diagrams

## Background to this activity

This activity builds on Activity 3.1 Your New Home, further extending students' understanding of the different components of the International Space Station. In Activity 3.1, students would have been introduced to the different parts of the ISS. They can now explore how these parts fit together, while also developing an understanding of map keys. You can build upon this by incorporating the concept of map keys into Activity 6.2 The Journey Home, where students create a map of the route from an imagined landing site to their home.

## Running the activity

Begin by showing children some images of the ISS, like this one: <http://www.esa.int/images/s132e012208.3.jpg> Ask students if they can identify on the image the different components from Activity 3.1. They can then complete the dot-to-dot component of the activity. Younger students may need some assistance with counting, so you could do this as a group.

Once the dot-to-dot is completed, discuss the concept of a map/diagram key as a group. You might like to show some examples from an atlas, map or diagrams such as this. This is also a good opportunity to incorporate learning about colours and how and why we form associations with colours. Use a colour wheel such as this one: <https://de.pinterest.com/pin/556405728936529087/> and ask students to select appropriate colours to match the function of a different part of the ISS. For example, the trusses might be black or blue as their role is to provide strength and support. The solar panels might be orange or yellow to show warmth and light.

To extend more able students, you could provide them with tourist maps or a street directory from a local area, so they can see other examples of map keys showing points of interest, public restrooms, banks and ATMs/ cashpoints, post offices, parks etc. Ask students to then draw their own map of the school grounds, local park or neighbourhood, marking points of interest and creating a corresponding map key. Alternatively, white out symbols on a map and ask students to fill them in according to the map's key.

## Questions for the class

- What is the purpose of a map key and why is it helpful?
- What other examples can you think of where symbols and images are used to represent something?
- Can you find any examples of signs at school or home which use images or symbols instead of (or as well as) text?
- Why did you choose certain colours for your map key? What meanings or emotions are you trying to convey with those colours?
- Why do we need to be able to communicate in more than one way?

## Extensions

Older students might like to use this ISS puzzle to create their colour coded drawing. This will require some delicate cutting out, so it may not be appropriate for younger pupils. <http://principiaspacediary.org/wp-content/uploads/2016/02/ISS-Puzzle-Visual-Literacy-Exercise.pdf>