BIG BANG DIGITAL ACTIVITY MISSION TO MARS

You have **15 minutes** to consider the information given to you and to map out your settlement, the clock is ticking, good luck!

Thales have been invited to take their best Engineers and Scientists to live as part of a new colony of researchers on Mars for a three year fact finding mission. Thales have been allocated a small area for their settlement and can choose from a number of pre designed hive rooms to create this living space. Your crew is made up of twelve Thales employees including yourself.

In small groups or individually you need to create a floor plan for the Thales Mars settlement. As you will see from the information below, there are many hive rooms available to you and the crew so take your time to consider what each room can offer and whether you think it would be essential to select each one. You will see from the floor plan on the settlement map that the space available to Thales in this new Mars colony is limited and you will need to make sure you take into consideration the restrictions outlined in this document when considering your layout.





RESTRICTIONS TO CONSIDER:

The generator in the Power Hive is extremely loud so should not be placed immediately adjacent to a sleeping hive.

In the event of potential flooding, Water Hives and Bathroom Hives cannot be placed immediately adjacent to a Power Hive, Communications Hive or Research Hive.

Productivity in your settlement will be increased if you place the Water Hive as closely as you can to a Propagation Hive.

A Kitchen Hive should not be placed next to an Oxygen Hive due to the oxygen posing a fire hazard.

NUMBER OF HIVES:

How you layout your settlement is entirely up to you but you can only have up to fourteen hives in total (this can include multiples of the same hive if you choose to do so).

BIG BANG DIGITAL ACTIVITY SETTLEMENT MAP

Lay out your hives on this sheet of paper (print/draw). You can create any layout but you are restricted by the floor plan the colony has allocated you below. **Please note every hive must be attached to at least one other** and you should consider the instructions and restrictions outlined on the worksheet.





BIG BANG DIGITAL ACTIVITY HIVE COUNTERS

Please use this sheet provided, by printing out the **'Hive Counters'** below and positioning them on the settlement map.





BIG BANG DIGITAL ACTIVITY **EXTENSION TASKS**

We hope you enjoyed completing the Mission to Mars task. If you would like to extend the activity, please see some ideas we have outlined below that could be stand-alone activities or will follow on from the video.

- Having completed the settlement floor plan ask the students to write a rationale explaining. why they produced their layout and which rooms they think would be essential for their crew.
- Using the hives already suggested get the students to design an entire colony thinking about additional hives that they might need to include of their own. Can the students think of any other environments where the hives could be used effectively?
- Ask the students to discuss as a group the top ten objects they think would be important to take to Mars as a group. Get them to then narrow this down to five and give a reason for each object.
- Focusing on the Engineers that spoke in the video get the students to research each type of . Engineering that is mentioned and the educational route into each role.

