A Teacher's Guide to Using AR in Google Expeditions

You will need:

- The Expeditions Lesson Pack

- A wireless network in your classroom. All devices must be connected to the same wireless network.

- The Google Expeditions app on your device. Make sure that the app has been updated to the latest version. Please see the Supported Devices sheet for a list of devices that fully support and can access all the augmented reality features of the Expeditions app. Please be aware that if your device is not on this list then it may not fully support the AR activities in this lesson.

- A class set of tablets or other mobile devices with the Google Expeditions app downloaded.

- Printed AR marker sheets (included in the Lesson Pack). These act as 'anchor' points for the AR models to display on children's screens. Place the marker sheets around the classroom to spread children out while they are using the AR. They should be placed at least two metres from each other.

Prior to the lesson, download your chosen AR tour in the Expeditions app so it is easily accessible.

It is strongly suggested that teachers familiarise themselves with the app and practise these steps before the lesson.
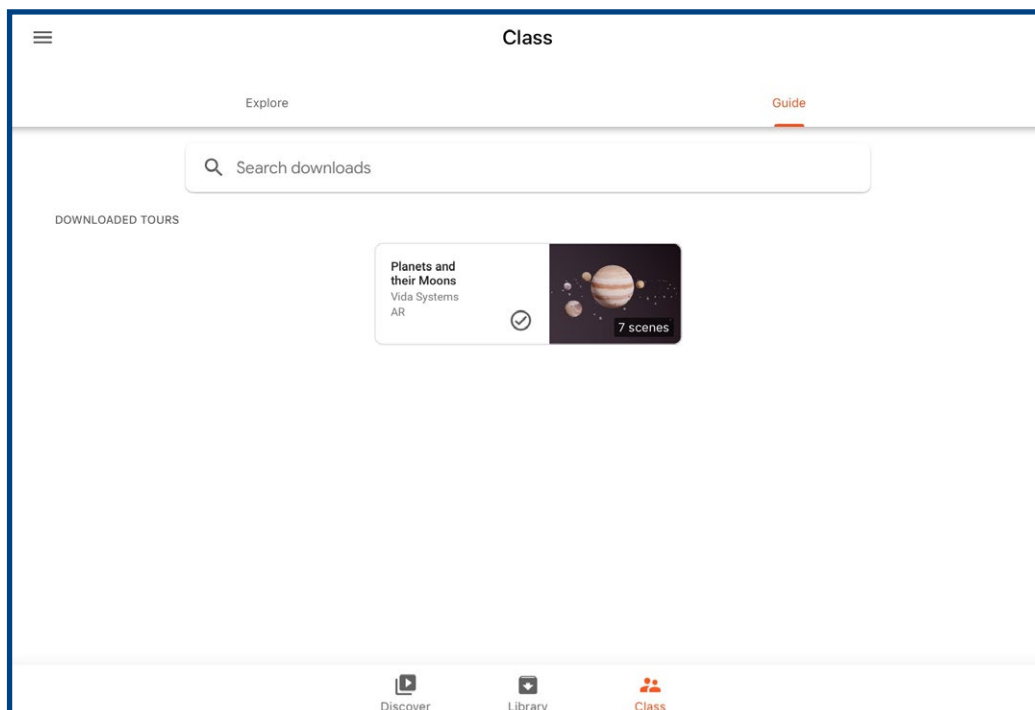
1 Open the Google Expeditions app. On the bottom menu, choose 'Class' and then 'Guide'. You will be acting as the guide for this tour; children will be acting as explorers.
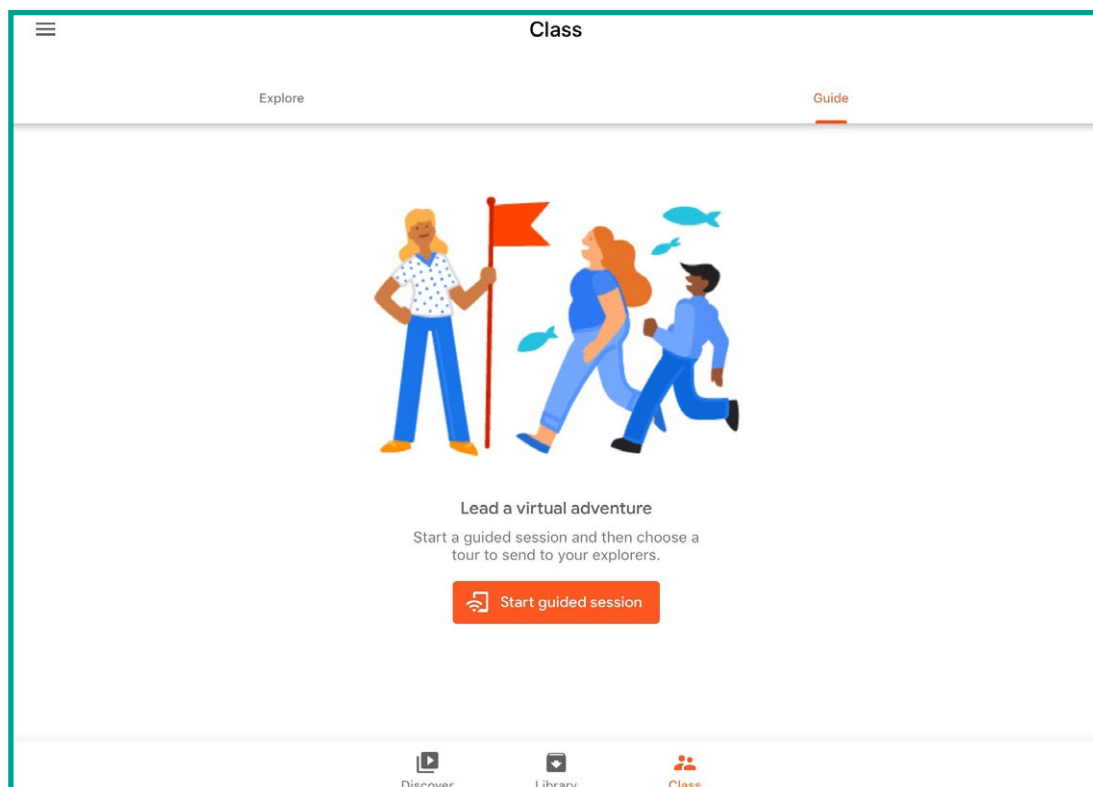
Choose 'Start guided session'. You may be asked to sign in with a Gmail account at this stage. This will then show you the tours that you have downloaded. Choose the correct tour.

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Choose 'Guide'. When you are shown the AR markers screen, choose 'Let's go'. If the app requests camera access, select 'Allow'. It will then show you your name or email address, the tour number and the network. Choose 'Got it'.

3
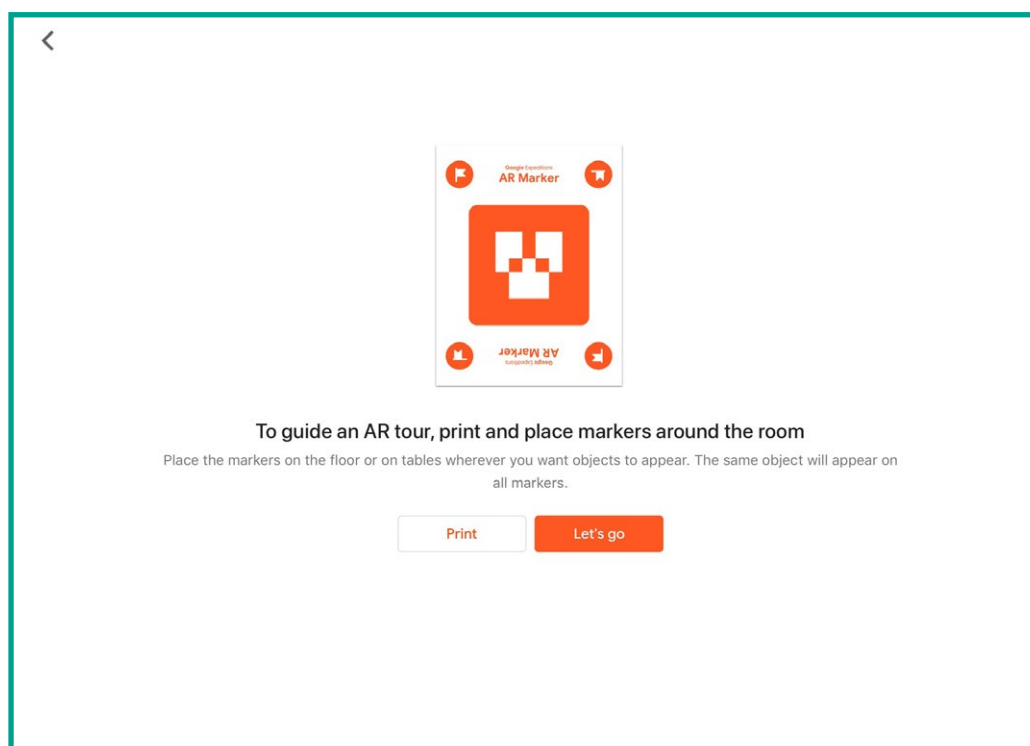
4 Ask children to open the app, choose 'Class' and then choose 'Join' to be an explorer on your tour. Children will see another box with your details and tour number on it. Read out your number so that they are sure they are joining the correct tour.

As children sign up to be an explorer, you will see the number of explorers at the top of your screen so you know how many have managed to join you.
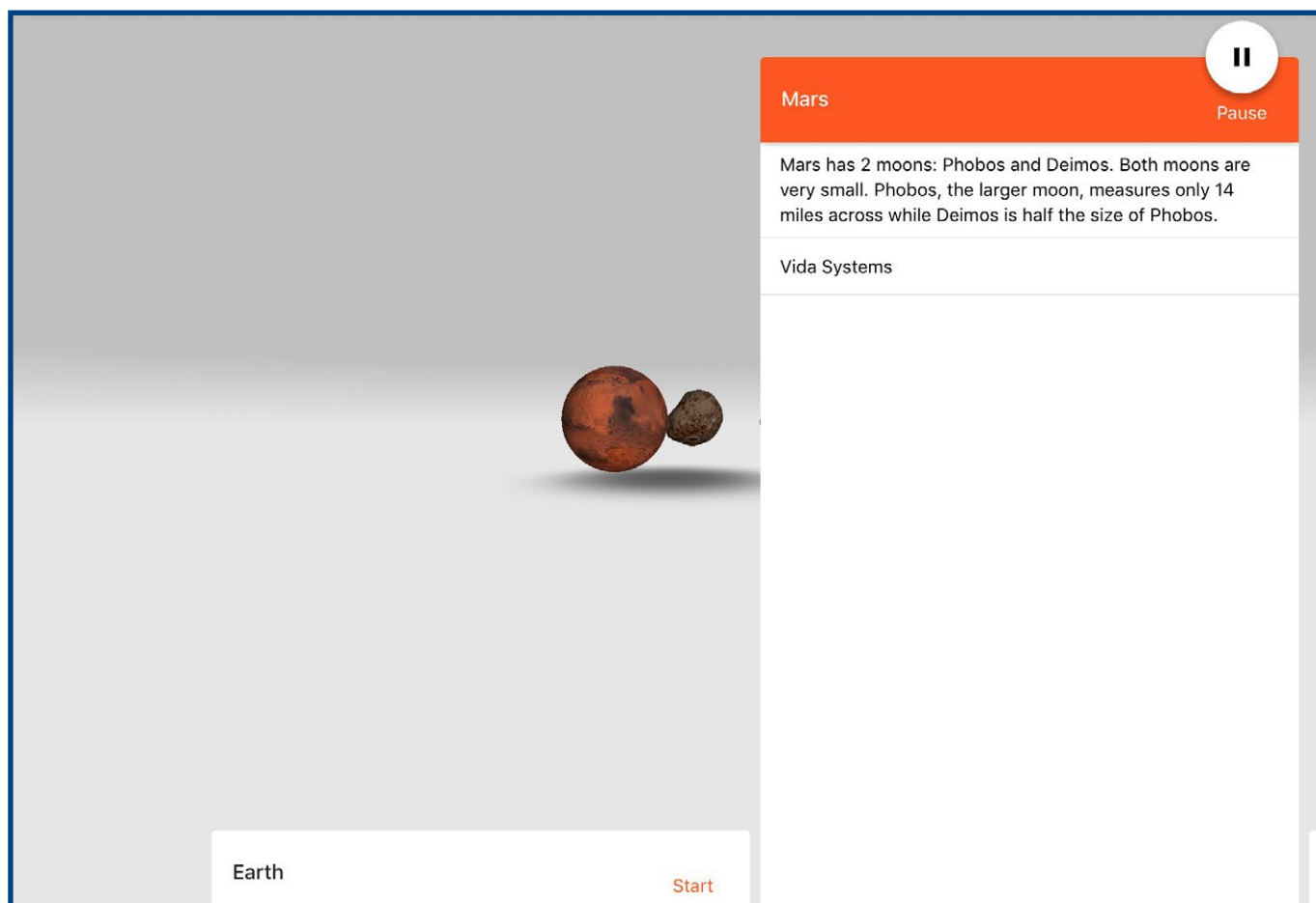
When you are ready to begin, choose 'Start' to view the first model in the tour. When children point their tablet at a marker sheet, they will see the first planet model appear on their screen as if it were in the room. Your guide screen will look slightly different to this. However, if you want to use the marker sheets to view the AR models as the children will, choose the ⬡ button at the top of the screen to view in AR mode and point your device at a marker sheet. Press ⬡ again to leave AR mode. **5**

Once you are on the tour:

- Tap on the banner at the bottom to show the information about that planet.

- Swipe left to move to the next screen.

- Swipe right to go back to the previous screen.

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- Press the Pause icon to pause a tour. Children will not be able to view a tour while it is paused.

- As the guide, you are able to resize an object. Do this by viewing in AR mode, pointing at a marker and pinching the screen. Choose 'Done' when you are happy and the explorers will then be able to see your changes.

- When not in AR mode, you can shine a spotlight on the object by pressing and holding your finger on the point where you would like the spotlight to shine. Use the slider at the bottom of the screen to adjust the size of the spotlight and choose 'Done' when you are ready for your explorers to see it. Tap anywhere on the screen again to remove the spotlight.

Mars

Pause

Mars has 2 moons: Phobos and Deimos. Both moons are very small. Phobos, the larger moon, measures only 14 miles across while Deimos is half the size of Phobos.

Vida Systems

Earth

Start

When you have finished the tour, press the X at the top left of the screen to close the tour.

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