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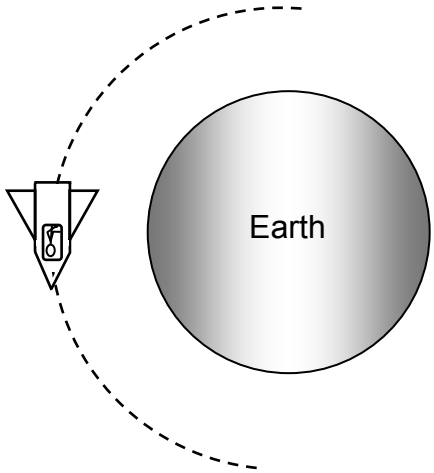
An astronaut in a spacecraft in orbit around the Earth experiences 'weightlessness'. She can float around inside the spacecraft, and other objects in the cabin also float around.



Look at each of the sentences below. For each sentence, put a tick (✓) in one box to show if you think it is true or false.

		True	False	Don't know
a	She feels weightless because the spacecraft is far away from the Earth, beyond the range of the Earth's gravity.			
b	She feels weightless because the spacecraft is outside the Earth's atmosphere, where there is no gravity.			
c	The force of gravity on the astronaut is bigger than on the Earth, because she is higher up.			
d	There <u>is</u> a force of gravity on the astronaut, but it is smaller than on the Earth.			
e	The astronaut feels weightless because the spacecraft's orbit is equivalent to freefall, and everything inside it is falling with it.			
f	The astronaut is moving in a circle, so the centrifugal force balances gravity and makes her feel weightless.			
g	The Earth's gravity only affects the spacecraft, so things inside it feel weightless.			