

**Section A: Gravity & Weight**

1. Mass is the amount of matter in an object and stays the same everywhere; weight is the force of gravity on that mass and can change depending on location
2. Yes, lighter - because the Moon's gravity is weaker than Earth's
3. Because without air resistance, gravity accelerates all objects at the same rate regardless of mass
4. Because they are in freefall around the Earth, meaning gravity is still acting on them but they are continuously falling with their spacecraft
5. Accept any two reasonable examples, e.g. keeping us on the ground, or making objects fall when dropped

Section B: Resistance & Friction

1. To reduce air resistance and allow faster, more efficient movement
2. Because it has a larger surface area, creating more air resistance to slow its fall
3. Because water creates more resistance against movement than air does
4. Accept any two reasonable examples with a way to reduce friction, e.g. squeaky hinges (add oil), or a stuck drawer (add wax/lubricant)
5. To increase friction/grip with the road, especially in wet conditions