# SMART I i-Course - Driving

# Gear change answers

### Why is it unnecessary to change through the gears sequentially in modern motor cars?

Car design has changed over the years, modern braking systems are more efficient and cars are much lighter than they used to be – this enables drivers to slow down without changing gear. More powerful engines and lighter cars also mean that gears can be skipped when changing up in some situations.

#### Why are mirror checks required before gear changes?

Gear changes are made when situations are changing – this will affect drivers behind. Also downward changes are often made before an increase in speed, this means that it is essential to check for overtaking vehicles.

#### Name a common cause of jerky gear changes.

Jerky gear changes can occur when the gas pedal is released too soon, the clutch is engaged to quickly. The change is made at the wrong speed or the engine speed is not adjusted to match the road speed.

## When might you miss an upward gear change?

Sometimes firm acceleration is required, for example when moving off into a busy traffic stream or when overtaking – on these occasions it can be beneficial to skip upward changes – for example, by changing from 1<sup>st</sup> to 3<sup>rd</sup>, 2<sup>nd</sup> to 4<sup>th</sup> or 3<sup>rd</sup> to 5<sup>th</sup>.

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