Success Criteria - I can analyze and answer comprehension questions for a displacement-time graph and a velocity-time graph and describe the motion of an object.

Speed-Distance-Time Graph Analysis Problems

Question 1: The distance-time graph shows class 8A's journey to the zoo. They stopped for a picnic on the way to the zoo.

(a) What time did the bus leave school?

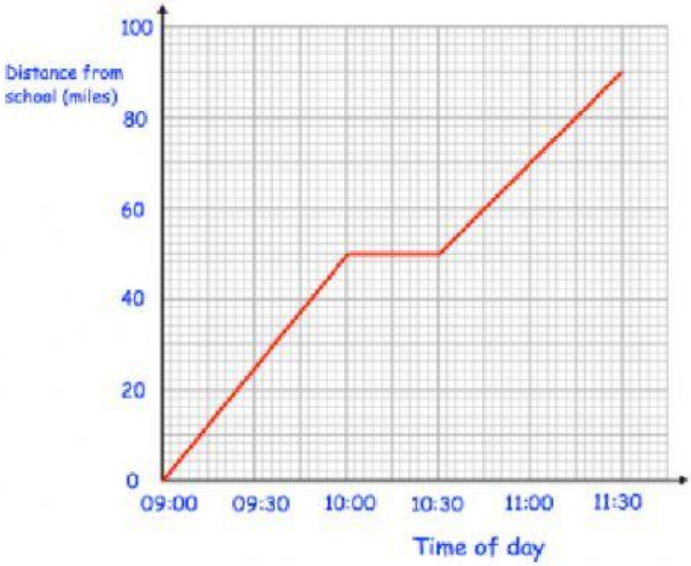
(b) What time did they stop for a picnic?

(c) How far had they travelled when they stopped for a picnic?

(d) How long did they stop for?

(e) What time did they arrive at the zoo?

(f) How far is the zoo from school?



Question 2: Emma travelled to her Grandmother's house and back. The distance-time graph shows information about her journey.

(a) What time did Emma begin her journey?

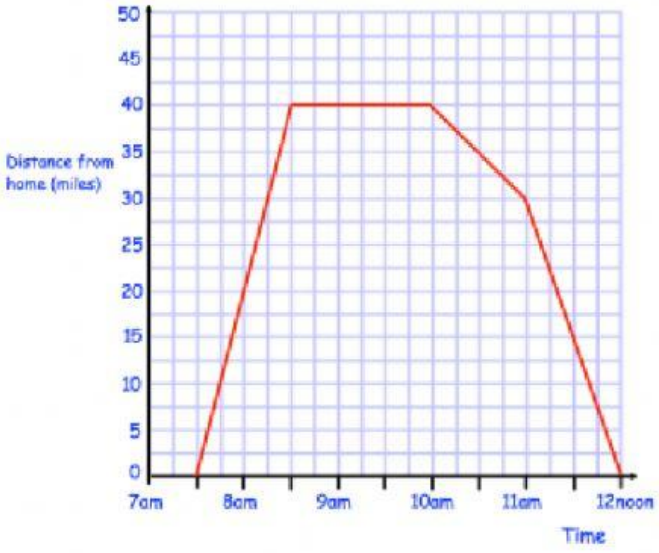
(b) How far was Emma from home at 8am?

(c) How long did Emma stay at her Grandmother's house?

(d) What time did Emma leave her Grandmother's house?

(e) How far was Emma from home at 11:45?

(f) How far did Emma travel in total?



Success Criteria - I can analyze and answer comprehension questions for a displacement-time graph and a velocity-time graph and describe the motion of an object.

Question 4: Ben drove 60 kilometres, from his home to Liverpool. He stopped and visited his friend Tim on the way.

(a) Work out Ben's speed for the first part of his journey.

(b) How long did Ben spend visiting Tim?

(c) Work out Ben's speed for the last part of his journey.

Question 5: Laura goes for a cycle from her house to the post office, 4km away.

(a) How long did it take Laura to cycle to the post office?

(b) Work out Laura's speed cycling to the post office.

(c) How long did Laura spend at the post office?

(d) Work out Laura's speed cycling back home.