

## The conceptual approach

The student is able to give accurate instructions for a path that will move an object between specified positions.

Prompts from the teacher could be:

1. Where is Charlie's house relative to the school?
2. What is the bus route that Charlie takes when he is on the blue bus?
3. Is there another way that Charlie could take the bus(es) home?
4. Give a suggestion for Charlie to get home by a shorter route. Describe this route.



S: I think he should just walk home. It doesn't look that far and it would save lots of money.

T: That's a good suggestion. There might be a reason that Charlie needs to take the bus sometimes. It might be raining. The road might be busy with no footpath. It might be a lot further than it looks.

S: He might have a broken leg and it's too far to hop with crutches.

T: Yes. So if he has to take the bus, is there a shorter journey?

S: Well, he is going to end up going kind of in a circle. He goes on the blue one and mostly turns left so ends up going around in a big loop. But with straight sides not round ones. He could go on the red one which turns in a smaller loop but goes off in the wrong way.

T: Can he take the red bus from school and still get home by bus?

S: Yes. If he gets off here (points to the shared bus stop) then catches the blue one. Oh, but even though he doesn't go as far that's a silly idea.

T: Why?

S: Well, it's the bus he would have been on anyway if he took that one from school and now he has to pay for another bus and had to wait out in the rain with his broken leg, so he should have just taken the blue one in the first place.