

PLANNING THE RAILWAY ROUTE



A series of green tiles are laid on the floor to create a 3x3 square, marked with coordinates.

The features include squares with:

- Community
- Historical ruins
- River
- Forest
- Hill
- City

Firstly, pupils should look at the table showing the coordinates that demonstrate where the feature cards should go, and lay the cards in the correct positions.

Each card shows a landscape setting on one side, and 2-3 implications of planning the route of the railway through this setting on the back.

Starting at Smeaton, pupils must decide where to place the railway track to plot a route to Saxby. Each time their route passes through a square with a feature card on it, they must take it in turns to read the implications on the back of the cards. The group should then debate whether they would decide to build the railway here, before moving on.

The facilitator/teacher must set the scene by explaining that for the railway to be 'high speed', they must aim to have the straightest route possible.

For less able/younger groups, show the image with the two suggested routes and use these as a starting point for their planning.



Proposed railway route 1

For working with a younger or less able group

This route has some curves to avoid a forest, which means the train cannot go as fast.

The journey time from Smeaton to Saxby is 50 minutes.

The old train takes 1 hour and 15 minutes.

Coordinates	Implication
1,1 City	<ul style="list-style-type: none">● Smeaton is a growing city, and the people who live there would like to be better connected to Saxby, a large city further north, where there is a wider range of jobs.● The purpose of the new railway is to reduce the time it takes people to get from one place to the next so that they can do business more easily and spend more time with friends and family.● Zoom Rail needs to take the quickest route, which is the straightest, but it is very important to be respectful of the environment and of the community living nearby.
1,2 Hill	<ul style="list-style-type: none">● Uh oh, the railway is blocked by a hill!● You could go up and over or around the hill, but this will slow the train down. Digging a tunnel allows us to quickly cut through hills.● When you build a tunnel, you have to move a lot of earth which will need to go somewhere else. You could use it to create banks along the side of the railway, which would reduce the noise of the trains and hide them from view.
2,3 Forest	<ul style="list-style-type: none">● Trees are important to our natural environment and home to lots of different animals, from squirrels to wild boar. Building the railway here would mean loss of habitat, and increase air pollution locally.● You could plant even more trees somewhere else nearby to make up for the ones you are cutting down, and create new spaces for wildlife.● Choosing to put the railway here will reduce disruption to the small community nearby, as the remaining trees will block the view of the railway.
2,2 Community	<ul style="list-style-type: none">● Building the railway here will mean that some people will have to sell their houses and move.● Building nearby to a community will be noisy and could upset the local home owners, but they won't have to move house.● If a station is built here along the route, it will mean more jobs in the community, and better transport in the area. The people will be able to reach the cities quickly, but it will slow the overall journey down slightly with an extra stop.
3,3 City	<ul style="list-style-type: none">● Saxby is a large, successful city. A high speed railway will reduce the time it takes people to get from one place to the next so that they can do business more easily and spend more time with friends and family.



Proposed railway route 2

For working with a younger or less able group

This route is mostly straight, which means the train can go much faster.

The journey time from Smeaton to Saxby is 35 minutes.

The old train takes 1 hour and 15 minutes.

Coordinates	Implication
1,1 City	<ul style="list-style-type: none">● Smeaton is a growing city, and the people who live there would like to be better connected to Saxby, a large city further north, where there is a wider range of jobs.● The purpose of the new railway is to reduce the time it takes people to get from one place to the next so that they can do business more easily and spend more time with friends and family.● Zoom Rail needs to take the quickest route, which is the straightest, but it is very important to be respectful of the environment and of the community living nearby.
2,1 River	<ul style="list-style-type: none">● You need to build a bridge to cross the water.● A bridge would interrupt the landscape and some boats might not be able to pass underneath.● A footbridge could also be built alongside the railway meaning that people could cross the river safely, where there was no crossing before.
3,1 Community	<ul style="list-style-type: none">● Building the railway here will mean that some people will have to sell their houses and move.● Building nearby to a community will be noisy and could upset the local home owners, but they won't have to move house.● If a station is built here along the route, it will mean more jobs in the community, and better transport in the area. The people will be able to reach the cities quickly, but it will slow the overall journey down slightly with an extra stop.
3,2 Historical ruins	<ul style="list-style-type: none">● This route would mean that the castle ruins would need to be removed or knocked down, and some people would be very sad to have lost part of their history.● You could delay the building of the railway to allow time for archaeologists to excavate the area. Ruins from the site could be displayed in a museum.● You could decide to leave the ruins where they are and re-route the track.
3,3 City	<ul style="list-style-type: none">● Saxby is a large, successful city. A high speed railway will reduce the time it takes people to get from one place to the next so that they can do business more easily and spend more time with friends and family.

PLANNING THE RAILWAY ROUTE

Zoom Rail needs to take the **quickest, straightest route** between two cities, but it is very important to be respectful of the environment and of the community living nearby.

1

Use the coordinates to place the feature cards in the squares on the mat.

2

Starting at Smeaton, plan your route to Saxby, placing track onto the mat.

Do you think this is a good route for the railway? What might happen? Who or what will be effected?

3

Discuss whether you think you have chosen the best route. Is there another option? Does everyone in your group agree?

Key



Community
(3,1 / 2,2)



Hill
(1,2)



City
(1,1 / 3,3)



Historial ruins
(3,2)



Forest
(2,3)



River
(2,1 / 2,2 / 3,2 / 3,3)