Plan a Trip

Shell Centre for Mathematical Education
Joint Matriculation Board

STUDENT'S BOOKLET
Plan a trip

This booklet will help you to plan a trip which your class will go on. There are four stages involved.

Stage 1
Looking at trips
pages 2–8

Stage 2
Making rough plans
pages 9–14

Stage 3
Making detailed plans
pages 15–22

Stage 4
Going on your trip
and evaluating it
pages 23–24
Stage 1  Looking at trips

In this stage, you will be working in groups of 2 or 3. To begin with, you will play

The Matlock Bath game.

This game involves going on an imaginary trip, making decisions and learning from what happens.

Then, you will be asked to think about

Trips you have been on.

These two activities should give you some ideas about what needs to be done and what mistakes must be avoided when planning your own class trip.
Imagine that you live in Nottingham. Your class is going on a trip to Matlock Bath, a small town in Derbyshire. You have to organise the trip.

Your group will need
- a pack of ‘The Matlock Bath game’ cards (numbered from 1–128)
- a ‘Record’ sheet for each person.
STAGE 1

The cards describe what is happening on the trip, but there are many points in the game when you have to decide what to do.

The front of each card tells the story of the trip.

The back of each card asks you what to do next.

How to play

- Find card 1 in your pack, and note down ‘1’ on side 1 of your ‘Record’ sheet.

- Read the front of the card, then turn it over, and make your first decision. (You will tell people what to bring.)

- Depending on your answer, take card 2, 3 or 4. Note down the number on your ‘Record’ sheet.

- Now read this new card . . . and so on.

As you play the game . . .

- Lay the cards you have used face upwards on the table
- Fill in side 1 of your ‘Record’ sheet.

When you have finished playing . . .

- Fill in side 2 of your ‘Record’ sheet.
  Your row of cards will tell the story of the trip.

- Compare your trip with one from another group.
  Which would you prefer to go on? Why?
Record sheet (side 1)

Name: Yasmeen

Where the money goes

Use this table to keep track of how much money you have left during your trip.

How much money each person starts with: £ 7.00

<table>
<thead>
<tr>
<th>What money is spent on</th>
<th>How much is spent</th>
<th>What is left to spend</th>
</tr>
</thead>
<tbody>
<tr>
<td>bus fare</td>
<td>15 p</td>
<td>£ 6.85</td>
</tr>
<tr>
<td>crisps</td>
<td>20 p</td>
<td>£ 6.65</td>
</tr>
<tr>
<td>bus fare</td>
<td>10 p</td>
<td>£ 6.55</td>
</tr>
<tr>
<td>return rail fare</td>
<td>£ 1.65</td>
<td>£ 4.90</td>
</tr>
<tr>
<td>lunch</td>
<td>80 p</td>
<td>£ 4.10</td>
</tr>
<tr>
<td>boating</td>
<td>50 p</td>
<td>£ 3.60</td>
</tr>
</tbody>
</table>

How we travel to Matlock Bath.

bus/coach/tram

How we spend our time at Matlock Bath

The time when we arrive: 13:08
The times when we can leave: 15:51

What the time is after we've done it: 12:38 pm

<table>
<thead>
<tr>
<th>What we do</th>
<th>How long it takes</th>
<th>What time is it?</th>
</tr>
</thead>
<tbody>
<tr>
<td>go to tourist office</td>
<td>20 min</td>
<td></td>
</tr>
</tbody>
</table>

Record sheet (side 2)

When you have finished playing the card game, fill in this side of the record sheet.

We left Greenwood Dale at: 10:45 am
We spent 4 hours at Matlock Bath
We got back at: 7:05 pm
We took £ 6.80 with us and spent £ 6.80
So we returned home with £ 0.20

Good points about the trip:
- Heights of Abraham
- Boating
- Lots of things to do

Bad points or things that went wrong on the trip:
- missed the Matlock bus in Nottingham
- home too late
- not enough time at Matlock Bath

Time | What we were doing
--- | -------------------
9:00 | at school
10:00 | end of first lesson
11:00 | bus to town
12:00 | catch train
1:00 | on the train
2:00 | in Denwood Cafe
3:00 | boating
4:00 | Heights of Abraham
5:00 | waiting for train
6:00 | on train
7:00 | arriving back at school
8:00 |    
9:00 |    
10:00 |    
11:00 |    
12:00 |    
Either try a challenge from page 6 or try the harder problem on page 7.

Put the cards back in order.
Choose one of the challenges below.
Use the cards to help you tackle your challenge.
Note down what happens on a fresh ‘Record’ sheet.

**Challenge 1**
Find a trip that costs less than £6. Make it as interesting and varied as you can.

**Challenge 2**
Find a trip that takes you to as many different attractions at Matlock Bath as possible.

**Challenge 3**
Find the quickest trip which costs less than £4 and takes you up and down the Cable Cars.

**Challenge 4**
Find the worst possible trip. How many things can you get to go wrong?

**Challenge 5**
Make up a problem of your own and try to solve it using the cards.
A harder problem . . .

Try planning a different trip to Matlock Bath without using the cards.

You could plan the trip starting from Greenwood Dale School or from your own school.

The information you need may be found on the desk labelled  

Plan it out on rough paper first – then write it out using a table like the one below:

<table>
<thead>
<tr>
<th>Time</th>
<th>Where we will be and what we will be doing</th>
<th>What we will spend</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Trips you have been on

Think of other trips you have been on – from school, with your youth group, with your family . . .

In your group, discuss trips you remember. What was good about them? What wasn’t so good?

Now fill in a copy of the ‘Trips I remember’ sheet.
Your group will now try to make a rough plan for a trip which the whole class would like to go on.

This will involve . . . .

- brainstorming
- choosing the best ideas from your group
- producing an ‘Ideas’ leaflet
- presenting your ideas to the rest of the class
- deciding upon the best place to go.

Before you start, your teacher will tell you when you can go and how long your trip can take.
STAGE 2

Brainstorming

You will each need a copy of the ‘Brainstorming’ sheet. On your own, make a list of

- places you could visit
- what you could do there
- how you could travel.

The Leisure Centre would be good. We could go swimming or play squash and we could go by bus.
Choosing the best ideas

Now look at all the lists that your group has produced. Give each person a chance to explain his or her ideas.

Some of the ideas may not be good choices for a class trip because

- they are too far away
- they are too expensive
- some people in the class may not want to go.

Cross these off your list.

Now circle the best ideas.

Aim to make your trip as interesting as possible for everyone in your class. Remember to cater for all tastes.
Producing an 'Ideas' leaflet

In your group, look at the ideas that are ringed. Try to decide which is the best choice for a class trip. Each person in your group must then fill in an 'Ideas' leaflet explaining this choice. (You may disagree on some details, but this doesn't matter.)

Your leaflets should say . . .
- where the place is
- what people will do there
- how you might travel
- how much it might all cost
- rough times (when would you leave, arrive at the place, leave to return and get back).
Presenting your ideas to the rest of the class

When your leaflet is finished, do the following.

- Swap it with one from another group.
- On the back of the leaflet, note down any good or bad points about it.
- Now swap this leaflet with one from a different group, and so on, until you’ve seen a leaflet from each group.
- Get your leaflet back again and improve it, using the comments.

Each group will now take it in turns to

- ‘sell’ an idea to the rest of the class and try to convince everyone that they would enjoy the trip.
- answer questions about it.

So, the leisure centre is cheap, you get a long time there and there is plenty to do.

Altrincham Leisure Centre
Costs: under £1
Travel: bus or coach
What you can do: Badminton
Swimming
Climbing
Deciding upon the best place to go

There may be one idea that everyone is happy with, but this is unlikely. You will need to find a way of deciding on the best place to go, so that

- everyone’s views are taken into account
- everyone will accept the chosen idea.

One way is to use a voting system of some kind. Here is an example:

<table>
<thead>
<tr>
<th></th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
<th>5th</th>
<th>6th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Snooker</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leisure Centre</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Castle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swimming</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canoeing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skating</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Who has put the leisure centre down as their first choice?

Reaching agreement may take time, but you shouldn’t rush this important step.
Stage 3  Making detailed plans

By now you should know where you’re going! In this stage you will be involved in . . .

- deciding what jobs need to be done
- sharing out the jobs and doing them
- reporting back and agreeing on details
- making sure that everything is ready
- completing the ‘Final plan’ sheet.
Deciding what jobs need to be done

You have decided where you are going, but there are lots of jobs to be done before you go. In your group, make a list of all the jobs that you can think of.

We'll need to find out about buses.

What about trains?

O.K. I'll write that down.

Someone will need to find out when it's open.

Someone will have to phone up.

Other people may have thought of jobs you've missed. On the blackboard make a complete list of all the jobs that your class has thought of.
You will need a copy of the ‘Jobs list’.

In your group

- cross out any jobs that don’t apply to your trip
- add any jobs that are missing
- make up some deadlines for doing each of the jobs.

Your class must now agree on the jobs and the deadlines. Your teacher will have a set of job cards to help.

Do we need to do this job? If so, when should it be done by?

Find out about coaches

You may have to make some extra job cards.
Sharing out the jobs and doing them

Your class now needs to share out the most urgent jobs. Each group will need a different ‘Job card’ and a ‘Job done’ sheet.

While jobs are being shared out, someone should make a ‘Jobs schedule’ poster to keep a record of:

- what needs to be done
- when it must be done
- who is responsible for doing it.

<table>
<thead>
<tr>
<th>Job</th>
<th>Must be done before</th>
<th>Who is doing the job</th>
<th>When done</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ask permission</td>
<td>Friday 3rd</td>
<td>Sarah, Plistair</td>
<td>✓</td>
</tr>
<tr>
<td>from teachers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Write letter to</td>
<td>Thursday 9th</td>
<td>Paul, Tom Errol</td>
<td></td>
</tr>
<tr>
<td>parents</td>
<td>Exit</td>
<td>Collette, Sanjay Alex</td>
<td>✓</td>
</tr>
<tr>
<td>Exit</td>
<td>Monday 6th</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
When you have finished doing a job, record all you did or found out on your ‘Job done’ sheet. Then . . .

- Attach your ‘Job done’ sheet to your ‘Job card’. Put these into the ‘Finished jobs’ box.
- Tick off the job on the poster so that everyone knows that you have finished your job.
- Choose another job to do. Try to make it the next most urgent job.

For some jobs, groups will need to report back . . .
Reporting back and agreeing on details

From time to time people will want to tell the class what they have done, and ask for opinions on what to do next . . .

I've been checking on coaches. It will cost £70 to hire one – that works out at about £3.50 each. Is that alright with everyone?

No, it's too much.

Have you thought of using the school minibus?

Often, one job will lead to another. You may need to add new jobs to the poster as you go along.
Making sure that everything is ready

Now talk through the day together, from start to finish – just as if you were on the trip.

Go through every detail and try to make sure you haven’t forgotten anything.

Make sure that all the jobs have been completed.

So, we’ll each bring £3.50, some old clothes, a cagoule, a packed lunch, and a torch.
When do we leave school?

12.00, meeting at the bus stop.

Which bus?

We’ll catch a 10 to the station.

Which train do we catch?
Completing the ‘Final plan’ sheet

Each person in your group should fill in a copy of this sheet. It will help you to remember all the details for your trip.

When you go on your trip, take your ‘Final plan’ with you.
Stage 4  Going on your trip and evaluating it

Now that all the plans have been made, you can go on your trip . . .

. . . and compare what you thought would happen with what actually happens.

You may like to keep a record of your trip by taking some photographs.
STAGE 4

After the trip

Think back over the trip and talk it through with your friends. Using an ‘Evaluating your own trip’ sheet, note down

- what really happened, including times and costs
- the things that were good about it
- the things that went wrong, or that were different to your plan.

Now that you have planned one trip, you may like to plan something more ambitious . . .