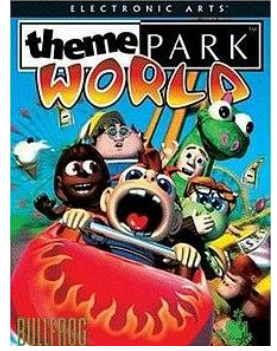


## Design your own Theme Park Challenge.

You are challenged to use all the maths skills you have developed this year to design a theme park

**Your spending limit is £50, 00**



- You need to decide on a name for your theme park.
- Many theme parks have different areas that are 'themed'. In other words they might have an African area, a wild west American area or an Old England area. Think carefully about what you want to have in yours.
- You must carefully decide what sort of rides you are going to have. You also need to think about the other facilities visitors will need when they come to your theme park like toilets, cafes, shops and paths between all the facilities and rides.

### There are 6 tasks to this challenge

Task 1: Set up your theme park.

Task 2: Work out the running costs of the theme park.

Task 3: Decide on a price per person to enter your theme park.

Task 4: Complete a profit and lost assessment, how much money your theme park will make.

Task 5: Make a map of your theme park.

Task 6: Advertise your theme park

Good Luck



**Task 1: Set up your theme park.**

Your spending limit is £50,000.

Design and draw your theme park on the squared paper.

You must not go over your spending limit and you must have car parks, toilets, paths to connect all the items, cafes and shops for your visitors, not just rides.

<b>Item</b>	<b>Number of squares to use when designing.</b>	<b>Cost</b>
Major ride	9	£5 000
Minor ride	6	£2 000
Café	4	£1 000
Shop	4	£4 000
Vending machine each	1	300
Toilets	4	£1 000
Paths		£10 per 1cm length (Paths can be drawn using a single line)
Lake		£1 000
Car park		£500 per square

**Task 2: Running your theme park**

To run your theme park the following costs will apply to each item that you have every day.

How much will it cost to run your theme park for one day?

<b>ONGOING COSTS</b>			
<b>Item</b>	<b>Staff Costs</b>	<b>Electricity/ maintenance/ repairs</b>	<b>Total Costs per day</b>
1 Major ride	£30	£40	<b>£70</b>
1. Minor ride	£20	£40	<b>£60</b>
1 Café	£10	£5	<b>£15</b>
1 Shop	£20	£20	<b>£40</b>
1 Toilet	£5	£5	<b>£10</b>

Show your calculations in the box.

Task 3: Decide on an entry price.

How much will it cost each person to enter your theme park?

You must make it cheap enough to attract visitors but enough to make a profit.

Decide on your price and then calculate how much money you will take each day, complete the chart

Entry fee will be £ \_\_\_\_\_ each

<b>Day</b>	<b>No of visitors</b>	<b>Takings</b>
<b>1</b>	224	
<b>2</b>	132	
<b>3</b>	264	
<b>4</b>	398	
<b>5</b>	433	
<b>6</b>	253	
<b>7</b>	176	
<b>8</b>	157	
<b>9</b>	524	
<b>10</b>	732	

**Task 4: Profit and Loss!**

Each visitor to your theme park will spend;

- £5 at each café you have
- £3 at each shop you have

Work out your total profit from the entry fee, cafes and shops. And put the total for each day in the box.

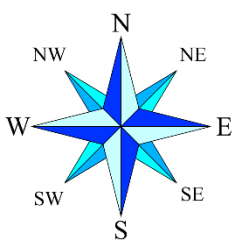
Then take away the total costs that you have already worked out and put it in the total costs box

Find your profit or loss for each day.

Day	Income				Total Costs (2)	Profit (1-2)
	Gate	Cafe	Shop	Total (1)		
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

**Task 5: Make a map of your theme park.**


**Think about the work we did on maps and co-ordinates and use the grid to make a map of your theme park and write directions to the various attractions from the entrance.**



Write directions to the attractions here:

Task 6: **Advertising.**

You have to decide on the signs you want to use to promote your theme park. Design your signs.




You will need to work out how much metal or plastic you need to make your signs, remember the work we did on finding the area and perimeter.

Use square paper to design the signs

Draw your sign and write down its length and width

Well done you have completed the challenge;

How did you find the challenge?

		
Easy	Tricky	Too hard

Because;