You have been bought in to build a new zoo and have been given £450,000 to spend. You will need to decide on the animals that you will keep in the zoo, your layout, where people will get food and drink from, where people can buy things in your zoo, and how they move around your zoo.

You will need to work collaboratively with your partner to create your own unique zoo. Your teacher will be awarding points for the best layout, the most interesting, best value for money and teamwork, so make sure that you are really focused!!

First, begin by designing your park on a sheet of squared paper. You and your partner must have identical layouts. On the next page is a table, which explains how much space each section of your zoo will take up.

|  |  |
| --- | --- |
| **Item** | **Number of Squares** |
| Entrance | 2 per kiosk |
| Car Park | 1 square per 6 cars or 2 squares per coach. |
| Paths | 1 square for each section |
| Toilets | 4 squares per 4 toilets |
| Shop | 6 squares |
| Ice Cream Stall | 3 squares |
| Vending machine | 1 square |
| Lockers | 2 squares per 6 lockers |
| Cafe | 8 squares |
| First aid | 4 squares |
| Tiger enclosure | 3 squares per tiger |
| Lion enclosure | 4 squares per lion |
| Elephant enclosure | 6 squares per elephant |
| Giraffe enclosure | 3 squares per giraffe |
| Penguin enclosure | 1 square per 5 penguins |
| Rhino enclosure | 4 squares per rhino |
| Seal enclosure | 3 squares per 2 seals |
| Meerkat Enclosure | 2 squares per 20 meerkats |
| Monkey enclosure | 5 squares per 4 monkeys. |
| Wolf enclosure | 4 squares per 4 wolves |

**Designing your Zoo**

You can select what animals are in your zoo, and choose how many of each of the animals you have in your enclosures, but if you would like 8 lions, you will need 32 squares for their enclosure. Your guest **must** have toilets to use, a first aid tent, a shop to go to, and somewhere to eat. You can have as many or few of these stands as you would like.

Remember that your only have £450,000 to spend!

**Building Costs**

Now you need to work out how much you have spent building your zoo. The table below shows your costs for each section.

|  |  |
| --- | --- |
| **Item** | **Cost** |
| Entrance (per kiosk) | £200 |
| Car Park (per square) | £500 |
| Paths (per square) | £25 |
| Toilets (per block) | £600 |
| Shop (per shop) | £2000 |
| Ice Cream Stall (per stall) | £1750 |
| Vending machine (per machine) | £80 |
| Lockers (per block) | £250 |
| Café (per café) | £2250 |
| First aid (per tent) | £1800 |
| Tiger enclosure (per tiger) | £2800 |
| Lion enclosure (per lion) | £3000 |
| Elephant enclosure (per elephant) | £3200 |
| Giraffe enclosure (per giraffe) | £2900 |
| Penguin enclosure (per 5 penguins) | £3800 |
| Rhino enclosure (per rhino) | £3300 |
| Seal enclosure (per 2 seals) | £2750 |
| Meerkat Enclosure (per 20 meerkats) | £2450 |
| Monkey enclosure (per 4 monkeys) | £7500 |
| Wolf enclosure (per 4 wolves) | £5670 |

**Running your Zoo**

It costs you money each day to run your zoo, and to keep your customers and animals happy. You need to use the table below to calculate how much it costs per day to run your zoo.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Ongoing Costs | | | | |
| Item (costs are for each item) | Staff Costs | Maintenance/ staff/ food/ repairs | Cost per day | Total cost per day (all of each item) |
| Entrance | £30 | £10 |  |  |
| Toilets (per block) | £5 | £15 |  |  |
| Cafe | £35 | £20 |  |  |
| Shop | £25 | £15 |  |  |
| Ice Cream Stall | £20 | £10 |  |  |
| Vending Machine | £5 | £10 |  |  |
| Lockers | £0 | £5 |  |  |
| First Aid | £45 | £20 |  |  |
| Tiger Enclosure | £45 | £50 |  |  |
| Lion Enclosure | £45 | £50 |  |  |
| Elephant Enclosure | £50 | £60 |  |  |
| Giraffe Enclosure | £45 | £55 |  |  |
| Penguin Enclosure | £20 | £65 |  |  |
| Rhino Enclosure | £45 | £55 |  |  |
| Seal Enclosure | £30 | £65 |  |  |
| Meerkat Enclosure | £25 | £25 |  |  |
| Money Enclosure | £25 | £45 |  |  |
| Wolf Enclosure | £20 | £45 |  |  |
| Total cost per day for all items | | | |  |

Now that you know how much it costs to run your zoo for the day, you need to think about how much you are going to charge each guest. Are you going to charge the same for adults and children?

**Entrance Costs**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Day** | **Adults** | **Children** | **Total** | **Day** | **Adults** | **Children** | **Total** |
| **1** | 120 | 257 |  | **16** | 432 | 756 |  |
| **2** | 155 | 297 |  | **17** | 457 | 831 |  |
| **3** | 98 | 134 |  | **18** | 463 | 752 |  |
| **4** | 138 | 352 |  | **19** | 497 | 831 |  |
| **5** | 241 | 341 |  | **20** | 503 | 872 |  |
| **6** | 257 | 418 |  | **21** | 521 | 873 |  |
| **7** | 291 | 433 |  | **22** | 576 | 896 |  |
| **8** | 287 | 397 |  | **23** | 584 | 913 |  |
| **9** | 294 | 432 |  | **24** | 599 | 914 |  |
| **10** | 313 | 475 |  | **25** | 603 | 962 |  |
| **11** | 334 | 487 |  | **26** | 610 | 982 |  |
| **12** | 362 | 498 |  | **27** | 615 | 995 |  |
| **13** | 377 | 531 |  | **28** | 623 | 998 |  |
| **14** | 384 | 550 |  | **29** | 646 | 1032 |  |
| **15** | 324 | 446 |  | **30** | 658 | 1057 |  |

Make sure that your cost isn’t too expensive- you don’t want to put people off, but if you don’t charge enough, you won’t cover your costs!

How much are you going to charge per:

Adult:……………… Child:…………………

In the table, it shows how many adults and children visit your zoo each day. You need to work out how much you will make each day in entrance fees, and how much you will make in total.

Great! Now you need to work out whether you are going to make a profit or a loss.

Whilst your visitors are in your zoo, they will each spend some more money… Each visitor will spend:

* £2 on a locker for the day
* £2 at each ice cream stand
* £4.50 at each shop
* £3 at each café
* 50p at a vending machine

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Day** | **Income** | | | | | | | **Total costs** | **Profit** |
| **Entrance** | **Lockers** | **Ice cream** | **Shops** | **Cafes** | **Vending machine** | **Total income** |
| **1** |  |  |  |  |  |  |  |  |  |
| **2** |  |  |  |  |  |  |  |  |  |
| **3** |  |  |  |  |  |  |  |  |  |
| **4** |  |  |  |  |  |  |  |  |  |
| **5** |  |  |  |  |  |  |  |  |  |
| **6** |  |  |  |  |  |  |  |  |  |
| **7** |  |  |  |  |  |  |  |  |  |
| **8** |  |  |  |  |  |  |  |  |  |
| **9** |  |  |  |  |  |  |  |  |  |
| **10** |  |  |  |  |  |  |  |  |  |
| **11** |  |  |  |  |  |  |  |  |  |

So, you need to write down how much the daily entrance costs are in the entrance column, write down how much your visitors spend whilst they are at your zoo, and the calculate that total. Finally, you need to take your daily running costs away from your daily income. The answer will be either your profit or loss.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Day** | **Income** | | | | | | | **Total costs** | **Profit** |
| **Entrance** | **Lockers** | **Ice cream** | **Shops** | **Cafes** | **Vending machine** | **Total income** |
| **12** |  |  |  |  |  |  |  |  |  |
| **13** |  |  |  |  |  |  |  |  |  |
| **14** |  |  |  |  |  |  |  |  |  |
| **15** |  |  |  |  |  |  |  |  |  |
| **16** |  |  |  |  |  |  |  |  |  |
| **17** |  |  |  |  |  |  |  |  |  |
| **18** |  |  |  |  |  |  |  |  |  |
| **19** |  |  |  |  |  |  |  |  |  |
| **20** |  |  |  |  |  |  |  |  |  |
| **21** |  |  |  |  |  |  |  |  |  |
| **22** |  |  |  |  |  |  |  |  |  |
| **23** |  |  |  |  |  |  |  |  |  |
| **24** |  |  |  |  |  |  |  |  |  |
| **25** |  |  |  |  |  |  |  |  |  |
| **26** |  |  |  |  |  |  |  |  |  |
| **27** |  |  |  |  |  |  |  |  |  |
| **28** |  |  |  |  |  |  |  |  |  |
| **29** |  |  |  |  |  |  |  |  |  |
| **30** |  |  |  |  |  |  |  |  |  |

**Advertising**

The weather is turning awful and your visitor numbers are going to drop. Work out how to advertise your zoo so that more people will visit it.

You need to design your advert and present it to the rest of the class. You can choose a poster, a leaflet, a radio advert, or a TV advert.

The rest of your class will vote on how persuasive your advert was. If they thought it was great, they’ll give you 5, if they though it was ok you’ll get 3, if they thought it was awful, you’ll get 1 mark. The more marks you get, the more visitors you’ll get to your zoo.

The problem is, advertising costs a lot of money, so it has to be worth it! You’ll need to work out whether your extra visitors paid for the cost of the advertising.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Method**  **(per week)** | | **Leaflets** | **Posters** | **Radio** | **TV** |
| **Cost** | | **£7,000** | **£6,500** | **£11,500** | **£13,500** |
| **Extra Visitors (per day)** | | | | | |
| **Class Rating** | **1** | **10** | **20** | **30** | **40** |
| **2** | **20** | **40** | **50** | **70** |
| **3** | **50** | **100** | **120** | **130** |
| **4** | **100** | **200** | **220** | **250** |
| **5** | **200** | **400** | **440** | **470** |

Remember that the extra visitors are per day, and your advertising lasted for a week, so you’ll need to work out the extra income per day, and then multiply that by 7!