summerlee
MUSEUM OF SCOTTISH INDUSTRIAL LIFE

NORTH LANARKSHIRE

MATHS in the museum

SUMMERLEE MATHS TRAIL

Primary 4 - 7

You will find the answers to each question around the museum. Use the pictures to help you find each location, or you can use the Summerlee visitors map to find your way around.

1. There are lots of different kinds of transport in Summerlee Museum. As you go around the trail, keep a tally of how many of each you can spot and write it into the chart below. Add up your total at the end of the trail and see which mode of transport you have spotted the most.

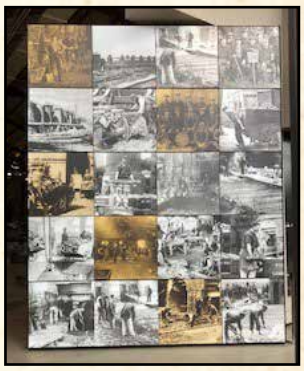
TYPE OF TRANSPORT	TRAM	BOAT	TRAIN	CAR	BIKE	OTHER
Tally (number spotted)						
TOTAL						

Questions 2-5 can be found in the main exhibition hall.

2. Estimate the length of Gibby the steam engine by measuring with your feet. Do you think this an accurate way to measure? Can you think of any other ways to calculate the answer?

3. Look closely at the wall of workers. How many workers can you see in the photos? Is it greater or less than 100?

   Many of these workers were children. John is 15 years old and works for 12 hours each day except for Sunday. For every day he earns 50p. How much does he earn in one week?



4. Visit the Co-operative shop. In the olden days you did not need to pay for your shopping at the time, but you could be invoiced (billed) once a month. If you buy an iron costing £1.25, and you have already spent £10.50 at the Co-op this month, how much will your total invoice be?

LIVE HERE

Move outside to answer questions 6-10

5. The Cardowan winding engine at Summerlee once used steam power to raise and lower miners and coal from the pit (like a lift). Its maximum load is 4 tonnes (about the same weight as an average hippopotamus). The last load raised was 2 tonnes of coal.

   Can you write this as a fraction of its maximum load?

6. The Summerlee tram takes 7 minutes to make a journey from the main tram stop to the cottages. It waits for 5 minutes between journeys to allow passengers to get on and off before returning. What is the frequency of the tram?

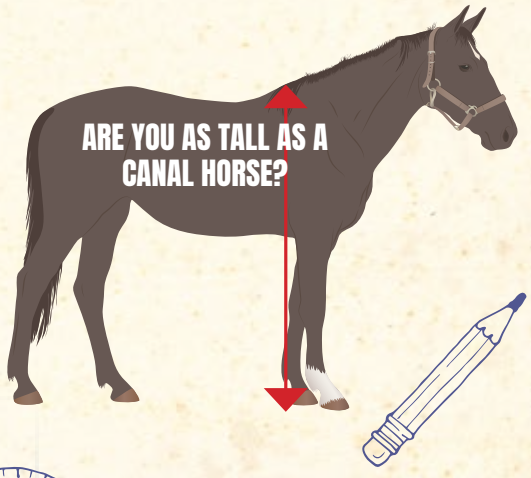
7. Read the information about this rail steam train near the main entrance. Can you calculate the age of this exhibit?

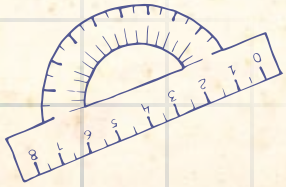
8. Look across to the café entrance. Choose a window which is symmetrical and draw it in the space on the right, marking on at least one axis of symmetry.

9. The concrete base of the engineering pavilion is large to fit in all the machinery. Use the measuring ruler on the side of your trail to calculate the perimeter of the base in m/cm.

10. The Vulcan barge carried people and coal along the Monklands canal, pulled along by canal horses. Stop here and measure the height of the canal horse. Why not use the traditional methods of measuring with your hands?

    You can measure your own height too.





Produced with support from Maths Week Scotland

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