

# Survival Skills

## Part 1

30 students from your Year 8 class are on a trip to learn about survival skills. Your teacher in charge, Mr.G decides to divide the class into groups of 3 for the survivor challenge.

- How many groups will Mr G make?

Each group will have the following equipment

Use the information from the pictures to answer the questions below.



1. Each person gets their fishing rod ready
  - How many metres of fishing line will each person have for their rod?
  - How many spare fish hooks does each group have?

2. Each group will need to spread out 3 sleeping bags on the ground sheet. How much space will there be for each student on the groundsheet?

## **Part 2**

Mr G says that each group will need to light a fire for each meal. There will be 2 lunches, 2 breakfasts and 1 dinner.

Your group divides the matches and the sticks for each meal.

- How many matches and sticks are there for each fire?
- To keep the fire going for each meal, you need 5 pieces of wood for each fire. How many pieces of wood will your group need to collect?

## **Part 3**

1. For the trip the students were given the following gear list

- Sleeping bag
- Insect repellent spray
- Hiking Boots
- Sunscreen

Since Manaspreet did not have the above gear, she decided to go shopping for it. Find the individual price of the above materials and write them down.

- Write the above things in the order of increasing price.
  - What will be the total price that Manaspreet would pay for all of the above?
2. On the way to the camp Mr. G decided to buy the students some ice popsicles since it was a hot day. He bought the 10 pk popsicles which had three different flavours in it. Each pack cost \$7. 49
    - How many packs of popsicles would he need to buy for the whole class?
    - What will be the total amount that he will need to pay for the popsicles ?
    - $\frac{2}{5}$  th of the flavour was lemonade,  $\frac{1}{2}$  was raspberry and the remaining is orange. What fraction of the pack is orange?
    - How many lemonade, raspberry and orange flavoured popsicles would there be in each pack?

#### **Part 4**

1. For one meal Mr.G gives each group a pack of sausages and 2 slices of bread per person. Each pack has 7 sausages in it which needs to be equally shared.

- What fraction of the sausages would each person get?
- Write this as a decimal.
- Change this to percentage.
- There are 18 slices of bread in each loaf. How many loaves of bread would the class need? Explain your answer.

2. For the food Mr.G buys loaves of bread at \$2.59 per loaf, 30 cartons of juice @ \$1.99 per carton, 2.15 kilo of banana @ 3.29/kg and 30 packs of sausages @ \$5.99/pack. How much would it cost for the food in total? What would be the cost per student?

#### **Part 5**

1. Luke purchased a sleeping bag from the Warehouse for the price of \$36. Two days later the same sleeping bag was on sale for \$28.80. By what percentage was the price for the sleeping bag discounted?

Criteria				
Number operation in context	<p>You have attempted to apply:</p> <ul style="list-style-type: none"> <li>• multiplicative strategies flexibly to whole numbers, equivalent fractions, decimals and percentages</li> <li>• multiplication and division as inverse operations on whole numbers</li> <li>• additive strategies flexibly to decimals and integers</li> </ul>	<p>You have applied number operations:</p> <ul style="list-style-type: none"> <li>• multiplicative strategies flexibly to whole numbers, ratios, and equivalent fractions, decimals and percentages</li> <li>• multiplication and division as inverse operations on whole numbers</li> <li>• additive strategies flexibly to decimals and integers</li> </ul>	<p>You have applied number operations in multiple steps with:</p> <ul style="list-style-type: none"> <li>• multiplicative strategies flexibly to whole numbers, ratios, and equivalent fractions, decimals and percentages</li> <li>• multiplication and division as inverse operations on whole numbers</li> <li>• additive strategies flexibly to decimals, integers and used order of operation</li> </ul>	<p>You have applied number operations in multiple steps precisely with:</p> <ul style="list-style-type: none"> <li>• multiplicative strategies flexibly to whole numbers, ratios, and equivalent fractions, decimals and percentages</li> <li>• multiplication and division as inverse operations on whole numbers</li> <li>• additive strategies flexibly to decimals, integers and used order of operation</li> </ul>
Number Knowledge in context	You have attempted to explain the strategies using steps	You have explained the strategies using steps	You have explained the strategies using multiple steps	You have explained the strategies using multiple steps with justification
Time management	You have yet to submit your assessment	You have not submitted the assessment on time	You have submitted the assessment on time	You have submitted the assessment on time
Overall	Working TOWARDS	Working AT	Working ABOVE	Working BEYOND

