Examples of 5th and 6th Class trail questions:

Number:

➢ Find the two numbers on the wall in this room – what is the product of them? Explain how you found your answer.

➢ How many seats are in this room? If the room were full of people and each person paid 50p to enter how much money would be paid in total?

➢ How many sweets are in the box. If they were divided among _____ children how many would each child get?

➢ If one bun costs ____ and you can buy 4 for €1, what is the percentage saving?

➢ What will this coat cost in the sale if 15% is taken from all items?

➢ What temperature is it here today. In winter the mean temperature is –2. What is the difference between the two?

➢ Look at the numbers on the wall – how many of these numbers are prime? How many are composite?

Shape and Space:

➢ Find lines that are parallel/vertical/horizontal.

➢ Face the _____. Turn one right angle to the right. What are you facing now?

➢ Find an example of a right angle in the area. Find an angle that is less/more than a right angle.

➢ Look at the pattern of tiles on the floor. What shapes have been used for this tessellation?

Measures:

➢ What temperature is it here today. In winter the mean temperature is –2. What is the difference between the two?

- Read today's temperature using the outside thermostat. Record it below using the appropriate unit of measurement.
- What would the temperature be if it was 5° cooler?
- How heavy is the _____ in grammes?
- Estimate how many _____ of water will fit in the _____. Check your answer.
- Estimate the perimeter of the playground. How could you calculate it?
- Estimate the area of the playground. How could you calculate it?
- How many windows are there on the school building? It takes the cleaner two hours to clean four of them – how long would it take him to clean all of the windows? Show how you calculated your answer.
- On what date was the _____ opened? How long ago is that in days, months, years?
- How many _____ can be bought with ___.
- How long is the _____. Give your answer in metres (using decimals or fractions, if necessary).
- If the train leaves the station at _____ and arrives in _____ at _____ how long will the journey take?
- Draw an analogue clock face showing the time on the _____.
- How many pennies/cents does the _____ cost?
- How long is the perimeter of the _____ ?
- Find the area of the _____?
- What is the exchange rate today for buying US dollars? How many dollars would I get for €100?

Data:

- Stand at the school gate. How many cars, lorries, vans, tractors pass in 15 minutes. Show this on a graph. Why do more lorries than cars pass at this time?
- How likely is it that _____ will happen here today?

➢ Put these statements in order of likeliness to happen.
➢ What is the average price of _____?

Examples of problems as a starting point for Trails

1. We have to replace all internal doors in the downstairs part of the school. We are going to cut out all the doors ourselves. The local hardware will only sell the timber we need in 6m x 6m squares. Each one costs €62.

- ↓ What is the least amount of money you can get all the doors for?
- ↓ How many doors are needed?
- ↓ What is the size of each door?
- ↓ How many doors per sheet?
- ↓ How many sheets will be needed?
- ↓ How much will it cost?

Extension Questions/ideas:

Handles = €4   hinges = €2.50

- ↓ How much for handles and hinges?
- ↓ If ready-made doors cost €100 each, how much would we save by making them ourselves?
- ↓ How much timber left over in off-cuts?

2. Your school is planning the annual Christmas trip to the pantomime (for 3rd to 6th class). The children in 5th and 6th class have been asked to find the following:

A: -   Theatres within 45 mins of the school

-    Suitable plays/shows for 3rd- 6th class
-    Dates and times of these shows
-    Ticket prices – adult and child
-    Group discounts

B: -   Bus companies in the area and their prices to each venue

-    Numbers travelling and buses required
-    Price of bus for each child

C: **-** Using the information gathered from A & B, decide which package offers the best value