Grade 4 holiday Maths activities for 2027

Visual learning guide - Maths · Grade 4

Try six low-cost activities with a clear challenge, an example and a way to check the result.

Start with the key idea

Choose a small activity, make a prediction, record the result and explain one decision. Mix number, measurement, shape, time and data across the holiday. Use the 2027 planner around your own school dates; no common holiday calendar or daily workload is assumed.

Choose an activity that fits your holiday

Use this as a menu, not a compulsory daily timetable. Pick two or three activities for a week if that fits the family's plans; one carefully discussed activity can also be useful. School calendars and holiday lengths vary, so the 2027 label does not announce dates.

Each activity follows the same routine: predict, try, record, explain. Keep one sheet per activity with the child's first attempt and one correction. Adults can read instructions aloud without doing the calculation.

Materials are simple: paper, pencil, a ruler, a clock and safe everyday objects. Use drawn money or pretend prices rather than making purchases. Do not require photographs, online accounts or personal family information to complete the activities.

Activity 1: make a picnic budget

Create a pretend menu: sandwich ₹35, fruit ₹18 and juice ₹22. You have ₹120 for a picnic. Choose a combination, calculate the total and find the money left. You may buy more than one of an item; write quantities clearly.

One sandwich, two fruits and one juice cost 35 + 36 + 22 = ₹93, leaving ₹27. The child should explain why the two fruits contribute ₹36 rather than ₹18. Check by adding the cost and the money left to recover ₹120.

Easier entry: choose one of each item and use a number line to add. Further challenge: find a different basket under the same budget, or decide whether adding another sandwich is possible. Do not treat the most expensive basket as automatically the best choice; discuss the stated goal.

Activity 2: estimate, measure and compare

Choose three safe objects, such as a book, a pencil and a table edge. Estimate each length in centimetres before measuring. Record estimate, measurement and the absolute difference between them. Align the ruler's zero with the start of the object, not necessarily the plastic edge.

If a book is estimated as 25 cm and measures 28 cm, the estimate is 3 cm away. If a pencil is estimated as 20 cm and measures 18 cm, it is 2 cm away. The closer estimate in these two cases is the pencil estimate; this is about error size, not object length.

Easier entry: use whole-centimetre objects and compare longer/shorter first. Further challenge: express 125 cm as 1 m 25 cm, or compare repeated measurements and discuss why they differ slightly. Record the actual result rather than changing it to match the prediction.

Activity 3: design a rectangular display

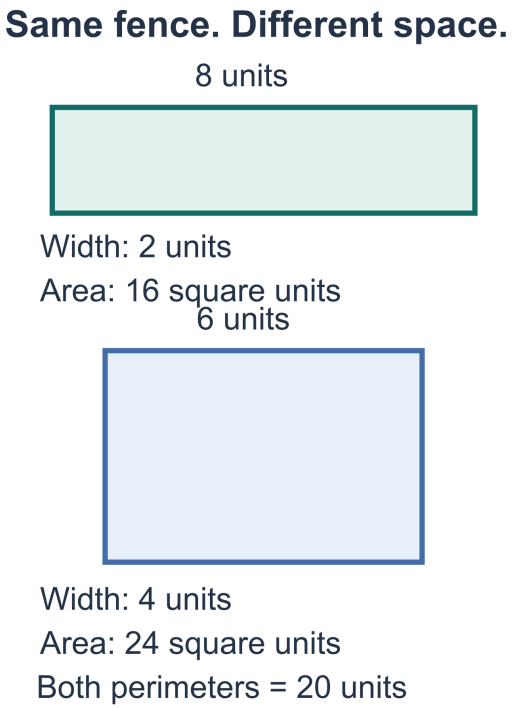
Draw 24 counters as equal rows. Find every distinct rectangular arrangement using all 24, counting a rotated arrangement only once if that is your chosen rule. The arrangements are 1×24, 2×12, 3×8 and 4×6.

Explain how you know the list is complete: test possible smaller row counts until the pairs start reversing. A row count of five does not work because 24 is not a multiple of five. Link each rectangle to a multiplication fact and a pair of factors.

Easier entry: begin with 12 counters. Further challenge: compare 24 and 25 counters. Twenty-five has 1×25 and 5×5; the square is a different kind of arrangement. The aim is to explain the organisation, not finish a timed drill.

Activity 4: use the same fence in a new way

On squared paper, draw rectangles with whole-number side lengths and perimeter 20 units. Count square units inside each. The possible pairs are 1×9, 2×8, 3×7, 4×6 and 5×5, ignoring rotations.



An 8-by-2 rectangle and a 6-by-4 rectangle both have perimeter 20, but their areas are 16 and 24 square units.

Their areas are 9, 16, 21, 24 and 25 square units. The square gives the largest area among these five whole-number rectangles. Say what was compared; this investigation alone is not a proof about every possible curved shape.

Easier entry: compare only 8×2 and 6×4. Trace the boundary to count perimeter, then count interior squares for area. Further challenge: use a perimeter of 24 units and look for a similar pattern. Keep units and square units distinct.

Activity 5: plan a mini outing

Use a pretend schedule: leave at 9:35, travel 25 minutes, spend 45 minutes at a library, then travel home for 25 minutes. Draw a timeline and write each arrival or departure time. The library visit begins at 10:00, ends at 10:45 and the return ends at 11:10.

Check the total duration in two ways: add 25 + 45 + 25 = 95 minutes, then compare 9:35 to 11:10. A timeline can split the interval at the next whole hour. Do not add clock digits as if 60 minutes were 100.

Easier entry: use quarter-hour times. Further challenge: add a ten-minute stop and explain which later times change. This is a planning task; no actual outing is required.

Activity 6: build a small data display

Make a tally of coloured counters or collect anonymous choices from willing family members. For example, preferred story settings might receive forest 5, space 3 and ocean 4 votes. Record the question and the number of responses before drawing bars.

The example has 12 votes. Use equal-width bars, a labelled axis and a consistent scale starting at zero. Forest has two more votes than space. This small group's choices do not establish what all children prefer.

Easier entry: use one square for one vote. Further challenge: use one square for two votes and decide how to show an odd count. Avoid collecting names or sensitive details; the mathematical task needs counts, not personal profiles.

Make a flexible plan and review one explanation

Write activity, materials, planned day and one question to discuss. Leave room for rest and changes. If a task causes frustration, reduce the numbers or model a single step, then let the child try a related example.

At the end, ask the child to choose one page worth keeping and explain why. Useful evidence includes a corrected calculation, a labelled diagram or a decision checked in two ways. A finished pile of sheets does not by itself show what the child can explain.

Use the worksheet to try a fresh version of each idea. The complete guide gives the activity instructions and answers; the worksheet can be used without screens. Bring a persistent difficulty to the child's teacher with a specific example of the work.

4 worked examples with reasoning

1. Can the ₹93 picnic basket include one more ₹35 sandwich within ₹120?

1. 93 + 35 = 128.

2. It exceeds the budget by ₹8.

3. Changing the basket is an option; silently increasing the budget is not.

2. A ruler shows a pencil from the 2 cm mark to the 17 cm mark. How long is it?

1. Find the difference between the two readings.

2. $17 - 2 = 15$ cm.

3. The final mark alone is not the length when the object does not start at zero.

3. Does a 3-by-7 rectangle fit the 20-unit fence?

1. Perimeter = 2 × (3 + 7) = 20 units.

2. Area = 3 × 7 = 21 square units.

3. The two results describe different parts of the drawing.

4. An activity starts at 14:50 and lasts 35 minutes. When does it finish?

1. Ten minutes takes the time to 15:00.

2. The remaining 25 minutes takes it to 15:25.

3. Check that 10 + 25 = 35 minutes.

Use the ideas without looking at the notes

Holiday activity card: Activity ___. My prediction ___. Materials ___. Result or drawing ___. How I checked ___. What I would change ___. A fresh question to try ___.

Pick a new activity when the current one has produced a useful explanation. Repeating identical questions is optional, not the goal of the holiday plan.

Common questions

Are these official summer homework tasks?

No. They are original optional BananaLearn activities. Follow any separate school instructions.

What are the 2027 holiday dates?

They depend on the school and region. This page does not announce dates; fit the activities around your confirmed calendar.

Do we need to buy materials?

Paper, a pencil, a ruler and safe ordinary objects are enough. Use pretend prices and drawn counters if preferred.

Should every activity be completed?

No. Choose according to time, interest and the skills you want to practise.

Can a younger or older child use them?

Adjust the numbers and support, and check whether the child understands the task. The grade is an intended level, not an ability label.

Connect your learning

- Explore factors through arrays
- Separate area from perimeter
- Extend elapsed-time reasoning
- Revisit learning with a parent

Ask about guided Maths learning if your child needs help explaining these ideas.

About this guide

Original explanations, examples, diagrams and practice by BananaLearn. The grade label indicates the intended learning level; this is not an official textbook extract or exam paper.

Grade 4 holiday Maths activities for 2027

Practice worksheet - Maths · Grade 4

Name: _____ Date: _____

Show your working. Answers and explanations follow on a separate page.

Try each question before opening its explanation. Show the calculation, evidence or reasoning that supports your answer.

Write an answer and your reason before opening the explanation. Check the reasoning as well as the final answer.

1. Two ₹18 fruits and two ₹22 juices cost how much?

2. How much is left from ₹120 after that basket?

3. An object runs from 3 cm to 21 cm on a ruler. Find its length.

4. Write 145 cm in metres and centimetres.

5. List the distinct rectangular factor pairs of 18.

6. Can 24 counters make equal rows of five with none left?

7. Find the area and perimeter of a 4-by-6 rectangle.

8. For perimeter 24, compare 4×8 and 6×6 areas.

9. Start at 10:45 and add 40 minutes.

10. How long is 9:35 to 11:10?

11. Counts are 5, 3 and 4. Find the total.

12. Why should a bar chart show its scale?

13. Which record is stronger: "I did measurement" or a table of estimates and lengths?

14. Write one change you made after checking your work.

Answers and explanations

Answer key - Maths · Grade 4

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1. ₹80.

36 + 44 = 80.

2. ₹40.

80 + 40 restores the budget.

3. 18 cm.

Subtract the initial reading.

4. 1 m 45 cm.

100 cm makes one metre.

5. 1×18, 2×9, 3×6.

Ignore rotations under the stated rule.

6. No.

Four rows use 20 and leave four; five rows would need 25.

7. Area 24 square units; perimeter 20 units.

Area counts the inside; perimeter counts the boundary.

8. 32 and 36 square units.

Both side sums are 12, but the products differ.

9. 11:25.

15 minutes to 11:00, then 25 more.

10. 95 minutes.

25 minutes to 10:00, then 70 to 11:10.

11. 12.

Add all categories once.

12. So the height can be interpreted as a count.

Without a scale, a reader cannot reliably recover the values.

13. The table.

It shows the actual comparisons and supports a discussion of the method.

14. Record your own correction and why it was needed.

There is no single model answer; the explanation should refer to actual work.