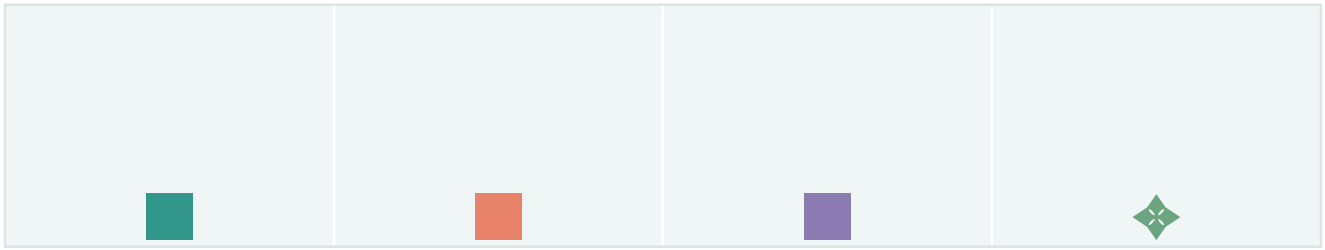
MATHS AT HOME

Discover the maths behind everyday family life



Inside this pack: 12 practical activities about routines, planning, household choices, resources and organising family life—plus a complete answer key.

NOTICE • PLAN • CALCULATE • ORGANISE

Name: _____ Date: _____

Welcome, Home Maths Explorer!

Maths is part of everyday life at home. We use it to plan our time, share tasks, understand household bills, organise supplies, compare choices and prepare for family activities. These challenges show how numbers can help make daily decisions easier.

Remember: Read carefully, show your calculations and include units where needed. Some activities ask you to make your own plan—there may be more than one sensible answer.

YOUR HOME MATHS TOOLKIT	
Time & schedules	Plan routines, calculate durations and organise a calendar
Money & choices	Add costs, compare options and stay within a budget
Operations	Add, subtract, multiply and divide everyday quantities
Tables & records	Organise household information and spot patterns
Space & layout	Use simple plans, coordinates and measurements
Reasoning	Make fair decisions and explain why a plan works

Home challenge: Ask a family member to check your plan or calculations. Everyday maths is even more useful when you explain your thinking.

1. A Day in the Life

A family member has planned these Saturday activities.

MATHS AT HOME • THINK IT THROUGH

Information: Breakfast: 8:15–8:35 a.m.; tidy room: 8:45–9:05 a.m.; reading: 9:15–10:00 a.m.; hobby time: 10:30–11:15 a.m.

1. How long does breakfast take?

_____

2. How long is the reading session?

_____

3. How much time passes between tidying and reading?

_____

4. What time does hobby time finish?

_____

5. Find the total time spent on the four activities.

_____

MINI CHALLENGE

Create your own morning routine with four activities. Write start and finish times and calculate the total time.

_____

_____

2. The Family Calendar

A family has several appointments during one week.

MATHS AT HOME • THINK IT THROUGH

Information: Monday – dentist at 4:00 p.m.

1. Tuesday – music lesson at 5:30 p.m.

2. Thursday – sports practice at 4:30 p.m.

3. Saturday – family visit at 11:00 a.m.

4. How many days have a planned activity?

5. How much time passes between the Monday appointment and Tuesday lesson, using the clock times only?

6. If sports practice lasts 90 minutes, what time does it finish?

7. The family visit lasts 2 hours 30 minutes. What time does it finish?

8. Which day has no listed activity between Wednesday and Friday?

MINI CHALLENGE

Make a weekly calendar with at least five activities. Use different colours or symbols to distinguish them.

3. The Chore-Rota Challenge

Three family members share household tasks. Each task earns points.

MATHS AT HOME • THINK IT THROUGH

Information: Alex: vacuuming 15, watering plants 5, setting table 5. Sam: washing dishes 10, folding laundry 10, setting table 5. Jo: tidying toys 10, watering plants 5, folding laundry 10.

1. How many points has Alex earned?

_____

2. How many points has Sam earned?

_____

3. How many points has Jo earned?

_____

4. Who has the highest total?

_____

5. How many points are earned altogether?

_____

MINI CHALLENGE

Create a fair chore rota for three people with at least two tasks each. Explain how you made the work fair.

_____

_____

4. Electricity Use Detective

A household records the electricity used by three appliances in one day. These are practice figures.

MATHS AT HOME • THINK IT THROUGH

Information: Fan – 0.8 kWh; television – 1.2 kWh; washing machine – 1.5 kWh.

1. How much electricity do the three appliances use altogether?

_____

2. How much more electricity does the washing machine use than the fan?

_____

3. If the television uses half the energy, how much would it use?

_____

4. What is the total for the fan and television together?

_____

5. If the household reduces its total by 0.5 kWh, what is the new total?

_____

MINI CHALLENGE

List three appliances at home. Predict which uses the most electricity and explain how you could check safely using an energy label or bill.

_____

_____

5. Water Wise at Home

A family is tracking water use for daily activities. Use these sample amounts.

MATHS AT HOME • THINK IT THROUGH

Information: Brushing teeth with tap running – 6 L; brushing with tap off – 1 L; washing vegetables – 5 L; watering plants – 8 L.

1. How much water is used by all four activities using the first brushing method?

_____

2. How much water is used if the tap is turned off while brushing?

_____

3. How much water is saved by turning the tap off while brushing?

_____

4. If the family brushes twice a day and saves 5 L each time, how much is saved in 7 days?

_____

5. What is the combined water use for washing vegetables and watering plants?

_____

MINI CHALLENGE

Choose one water-saving habit. Write how you could measure the amount saved over one week.

_____

_____

6. Plan a Household Budget

A family has set aside $120 for a small household shopping trip.

MATHS AT HOME • THINK IT THROUGH

Information: Cleaning supplies – $24; pantry items – $38; light bulbs – $16; laundry supplies – $19.

1. How much will the four groups of items cost altogether?

_____

2. How much money will remain from the budget?

_____

3. If the family also buys batteries for $8, how much will remain?

_____

4. The family decides to spend only $10 on laundry supplies. How much would this save?

_____

5. If the saved amount is added to the remaining budget from the original list, how much money will be available?

_____

MINI CHALLENGE

Make a household shopping list with a budget of $50. Choose at least four items and calculate the amount left.

_____

_____

7. Pantry Inventory

A kitchen cupboard is checked at the start and end of the week.

MATHS AT HOME • THINK IT THROUGH

Information: Pasta: start 5 packs, used 2; rice: start 3 bags, used 1; cereal: start 4 boxes, used 3; soup: start 6 cans, used 2.

1. How many pasta packs remain?

_____

2. How many items remain altogether across all four types?

_____

3. Which item has the fewest units remaining?

_____

4. How many more soup cans than cereal boxes remain?

_____

5. If 2 more rice bags are bought, how many rice bags will there be?

_____

MINI CHALLENGE

Make a simple inventory of five items you might find in a kitchen cupboard. Record quantities in a table.

_____

_____

8. Laundry Sorting Patterns

Laundry can be sorted into groups before washing.

MATHS AT HOME • THINK IT THROUGH

Information: White items – 8; dark items – 12; coloured items – 10; towels – 6.

1. How many items are in the basket altogether?

_____

2. What fraction of the items are towels?

_____

3. How many more dark items than white items are there?

_____

4. If 4 coloured items are washed, how many remain?

_____

5. The remaining items are placed equally into 4 piles. How many items are in each pile?

_____

MINI CHALLENGE

Design a sorting key for a laundry basket. Use categories that make sense and explain how your system helps.

_____

_____

9. Arrange the Living Room

A living room plan uses a simple grid. Each square represents one equal floor tile.

MATHS AT HOME • THINK IT THROUGH

Information: The room is 6 tiles long and 4 tiles wide. A sofa covers 3 tiles, a table covers 2 tiles and a bookcase covers 2 tiles.

1. How many tiles cover the whole room?

_____

2. How many tiles are covered by the three pieces of furniture altogether?

_____

3. How many tiles remain uncovered?

_____

4. If one more chair covers 1 tile, how many uncovered tiles remain?

_____

5. What fraction of the room is covered by the sofa?

_____

MINI CHALLENGE

Draw a 6-by-4 grid. Place a sofa, table and bookcase without overlapping. Label each item.

_____

_____

10. Home Maintenance Planner

A family plans four small jobs around the home.

MATHS AT HOME • THINK IT THROUGH

Information: Replace a light bulb – 10 minutes; organise a shelf – 25 minutes; water plants – 15 minutes; sort a drawer – 20 minutes.

1. How long will all four jobs take?

_____

2. If jobs begin at 10:15 a.m. and are completed one after another, when will they finish?

_____

3. How much longer does organising a shelf take than replacing a bulb?

_____

4. If a 10-minute break is taken after the second job, what is the new finish time?

_____

5. If the family has only 60 minutes, which job could be postponed while completing the other three shortest jobs?

_____

MINI CHALLENGE

Create a weekend home-task schedule with three jobs, estimated durations and start times.

_____

_____

11. Sharing Fairly

A family is sharing items equally. Work out how many each person receives.

MATHS AT HOME • THINK IT THROUGH

Information: 24 strawberries are shared equally among 4 people; 30 crackers among 5 people; 17 cupcakes among 4 people; 36 napkins are placed 6 at each table; 28 pencils are shared among 7 people.

1. How many strawberries does each person receive?

_____

2. How many crackers does each person receive?

_____

3. How many cupcakes does each person receive and how many are left over?

_____

4. How many tables can be set with the napkins?

_____

5. How many pencils does each person receive?

_____

MINI CHALLENGE

Think of something at home that needs to be shared. Write a division question and solve it.

_____

_____

12. Plan a Family Get-Together

A family is planning a small get-together for 12 guests.

MATHS AT HOME • THINK IT THROUGH

Information: Each guest receives 2 paper cups and 1 plate. Cups are sold in packs of 10 and plates in packs of 6. Each snack box costs $4.

1. How many cups are needed?

_____

2. How many packs of cups must be bought?

_____

3. How many plates are needed and how many packs of plates must be bought?

_____

4. If one snack box is planned per guest, what is the total cost?

_____

5. The event begins at 3:30 p.m. and lasts 2 hours 45 minutes. What time will it end?

_____

MINI CHALLENGE

Plan a simple family get-together for 8 people. List three things to prepare and use maths to work out quantities or timings.

_____

_____

ANSWER KEY

Suggested answers are provided below. For planning and design challenges, answers may vary. Check that calculations are correct and that each plan is practical and clearly explained.

CHECK YOUR HOME MATHS

1. A Day in the Life

1. 20 minutes

2. 45 minutes

3. 10 minutes

4. 11:15 a.m.

5. 2 hours 5 minutes

2. The Family Calendar

1. 4 days

2. 1 hour 30 minutes

3. 6:00 p.m.

4. 1:30 p.m.

5. Wednesday

3. The Chore-Rota Challenge

1. 25 points

2. 25 points

3. 25 points

4. All three are tied

5. 75 points

4. Electricity Use Detective

1. 3.5 kWh

2. 0.7 kWh

3. 0.6 kWh

4. 2.0 kWh

5. 3.0 kWh

5. Water Wise at Home

1. 20 L

2. 15 L

3. 5 L

4. 70 L

5. 13 L

6. Plan a Household Budget

1. $97

2. $23

3. $15

4. $9

5. $32

7. Pantry Inventory

1. 3 packs

2. 10 items

3. Cereal (1 box)

4. 2 cans

5. 4 bags

8. Laundry Sorting Patterns

1. 36 items

2. 6/36 = 1/6

3. 4 items

4. 6 items

5. Not possible to divide 6 whole items equally into 4 piles; some piles would have 1 and others 2.

9. Arrange the Living Room

1. 24 tiles

2. 7 tiles

3. 17 tiles

4. 16 tiles

5. 3/24 = 1/8

10. Home Maintenance Planner

1. 70 minutes

2. 11:25 a.m.

3. 15 minutes

4. 11:35 a.m.

5. Postpone organising a shelf (25 min); the other three jobs take 45 minutes.

11. Sharing Fairly

1. 6 strawberries each

2. 6 crackers each

3. 4 cupcakes each, 1 left over

4. 6 tables

5. 4 pencils each

12. Plan a Family Get-Together

1. 24 cups

2. 3 packs

3. 12 plates; 2 packs

4. $48

5. 6:15 p.m.

WELL DONE, HOME MATHS EXPLORER!

You used maths to plan routines, share responsibilities, manage resources, organise spaces and make everyday decisions. Keep looking for the numbers that make home life work!