



Marking and Feedback in Mathematics

This document supplements the main Galley Hill Feedback Policy and offers guidance in ensuring marking in Mathematics is an effective tool which provides the opportunity for children to reflect on and extend their own learning.

Essential Teacher Guidance:

- ✓ All marking should be completed in purple pen.
- ✓ Pink highlighters should be used when asking children to respond to specific questions

Minimum requirements for every piece of work:

- ✓ **Short Date** - underlined (e.g. 24.02.18)
- ✓ **Short Clear 'I Can' Title** - underlined (e.g. I can understand pie charts, I can multiply using the formal written method)
- ✓ **Use of a Ruler** – for ALL straight lines (E.g. as part of a calculation/ a graph)
- ✓ **Use of Pencil** - for all new work children complete
- ✓ **Use of Red Pen** – for all response work (see below for further details)
- ✓ **Digits** – in separate square boxes

Maths Sessions

- ✓ **Mental Maths – 3 days a week (KS1 = 15 mins and KS2 = 20 mins)** – children should be practising rapid recall of KIRFs in a variety of ways. E.g. Chanting, games, quick fire timed written activities, timed activities on IWB
- ✓ **Main Maths Session – Every day (KS1 = 45 mins and KS2 = 50 mins)** – children should be taught all maths skills from LTP (Number, Ratio and Proportion, Algebra, Measurement, Geometry and Statistics). They should have the opportunity to practise and apply these skills in a variety of contexts (see 'Application of Knowledge & Skills' below).
- ✓ **Clocks – at least 3 days a week (Year 2 only = 10 mins)** – a range of show me activities (using individual clocks for every child) to allow children to practise telling the time.
- ✓ Any other sessions should be in addition to those mentioned above.

At the beginning of EVERY Main Maths Session, the first 8 minutes are dedicated to response or revision. The final 2 minutes are used to evaluate work.

1. **Response Time** - Children must be given either an independent challenge, or invited to the Response Table to work with the teacher. The focus will be based on work from the previous session. The first 8 minutes will allow children to respond, and the final 2 minutes will allow children to mark their work (see

further guidance in the table below.) These timings should be stringently adhered to, to ensure that 40 minutes of the lesson is still intact for new learning. The use of a timer is imperative to negate drift (see Challenge Screen).

2. **Revision Time (at least once a week)** - This 20-minute session should be dedicated to questions linked to prior learning e.g. children may be given questions ranging from written methods of calculation, explaining the properties of 3D shapes, rounding numbers, interpreting a Venn diagram and converting measurements. These should be areas already covered earlier in the year to ensure retention of skills.

Application of Knowledge & Skills - At the end of every unit of work, children should have the opportunity to **apply their knowledge and skills** in a range of problem solving activities. This might include finding all possibilities, logic problems, finding rules and describing patterns, diagram problems and visual problems or word problems.

The table below details how marking should be completed, depending on how successful the children have been in a specific task. Following on from this, a detailed breakdown explains marking strategies, including examples where these strategies have been used in children's work.

Work is correct		Careless Errors	Work is incorrect	
All Correct ↓	Correct but inefficient methods ↓	Careless Errors ↓	Incorrect and inefficient methods ↓	Incorrect and lack of understanding ↓
Complete Challenge A on the IWB	Complete Challenge B on the IWB (This challenge will include a teacher modelled example of the work)	Teacher to 'pink' the errors and children to solve correctly during response time the next day	Complete Challenge C on the IWB (This challenge will include a teacher modelled example of the work)	Children should be invited to the Response Table to work with the teacher to address errors and misconceptions.

Methods of Marking

1) Challenge

- ✓ **Challenge A** - Offer a differentiated challenge to the children to **extend** their learning in that particular area. (See attached example of Challenge Screen to show how this might look in the classroom).
- ✓ **Challenge B and C** – A challenge which will **consolidate/extend**, but also include a modelled teacher example on the IWB.
- ✓ **Top Tips** – Occasionally, the challenge set might be to write a 'Top Tip' on how to be successful in this area. These could possibly be photographed/duplicated to display in class to support other children. 'Top Tips' may be verbal in Year 1.
- ✓ **Explanation** – Occasionally, the challenge might be to ask children for a written explanation of how they worked out a calculation or explaining why a particular calculation or problem is incorrect. Explanation may be verbal in Year 1.

2) **Correct Errors** - Children should be asked to correct the errors highlighted in pink during response time the next day.

3) **Response Table** - If children have shown a lack of understanding, they should be invited to the Response Table to address misconceptions.

4) Self-Assessment – See Main Feedback Policy.

What should 'Marking and Feedback' look like in Maths?

CHALLENGE QUESTIONS

Ask a range of open and closed questions

- What even numbers lie between 10 and 20?
- Find 3 ways of completing
_ % of _ = 30
- These numbers are in order from largest to smallest
56, _, 45,_, 37, _ 33. Think of a number that could go in each space.
- Draw a triangle with a line of symmetry that does not have a right angle
- If $7 \times 8 = 56$, what is 0.07×8 ? Give some other decimal facts that are linked to this fact.
- Give me 3 division facts that have a remainder of 1
- Tell me 2 lengths that make 1 metre
- There are 28 children in the class. $\frac{3}{7}$ are girls, how many girls are there?
- Can you now order these 3 digit numbers?
- What is the difference between 1999 and 4003?
- Shade $\frac{1}{2}$ of this shape
- Fill in numbers on this 100 grid

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		57

TOP TIPS

What tips would you give someone who is...

- ...learning how to round numbers to the nearest 10 or 100?
- ... using column addition to solve addition?
- ...who is trying to measure angles using a protractor?
- ... who is trying to solve word problems?
- ... who is finding lines of symmetry?

EXPLANATIONS

This could involve explanations of success or errors

- Can you explain how you solved this question?
- Can you explain how you are certain you have found all possibilities?
- Can you explain why a number which ends in 3 can't be a multiple of 4?
- Can you explain why two of the three angles in my triangle can't be obtuse?

MODEL AN EFFICIENT METHOD OR OFFER A TEACHER TIP

Offer a teacher tip

- Remember one hundred and two is 102 not 1002 – use hundreds, tens and units columns to help
- Remember it is easier to count on from the largest number

Modelling

Child Recording

$$32 - 17 =$$

$$30 - 10 = 20$$

$$7 - 2 = 5$$

$$32 - 17 = 25$$

Teacher modelling

$$32 - 17 = 32 - 10 - 7$$

$$= 22 - 7 \text{ (or } 22 - 2 - 5)$$

$$= 15$$

Now try this one...

Challenge Screen Examples

Challenge A

Look at the 'Chocolate Calculator Cake'

1. How much soft brown sugar would be required for 7 people? (Show working out)
2. Write the ratio of margarine, flour and chocolate, then find its lowest term.

Challenge B

Tip: Converting fractions into decimals if you are unable to convert them easily into tenths or hundredths

$$1/6 = 0.166 \text{ or } 0.167$$

$$\begin{array}{r} 0.166 \\ 6 \overline{) 1.1000} \\ \underline{6} \\ 10 \\ \underline{12} \\ 40 \\ \underline{42} \\ 40 \\ \underline{42} \\ 40 \end{array}$$

1. What fraction of the large packet of chocolate buttons would be required for 1 serving of chocolate cake? (1 large packet required for 15 servings)
Convert the fraction into a decimal to 3 d.p.
2. The recipe says to use 40ml – 60ml of milk for 15 servings. How much would you need to use to make sure that each slice contained 4ml of milk?

Check your PINK

Complete either:

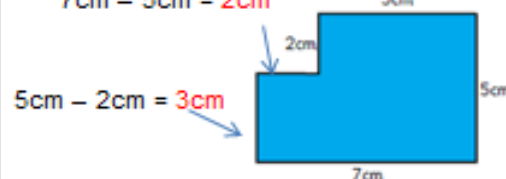
- Corrections (probability and scaling) followed by challenge specified
- Challenge A
- Challenge B
- If you complete one challenge, try the other challenge.

Challenge A

1. Find the length of each side of a square if its perimeter is 20cm
2. Find the length of each side of a rectangle if its perimeter is 20cm. Find all possibilities. (Tip: There are 5 possibilities)
3. Create your own challenge (complete with answer on back) using blank challenge card)

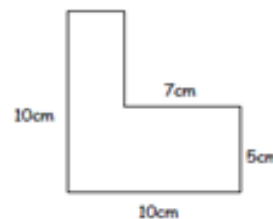
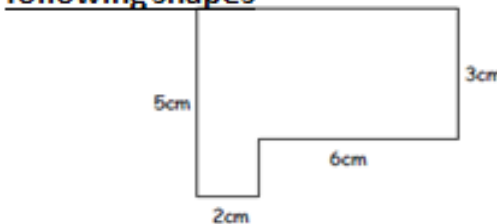
Challenge B

Tip: Step 1 – Work out the missing lengths
 $7\text{cm} - 5\text{cm} = 2\text{cm}$



Step 2 – Add all sides together
 $7\text{cm} + 5\text{cm} + 5\text{cm} + 2\text{cm} + 2\text{cm} + 3\text{cm} = 24\text{cm}$
so perimeter = 24cm

Find the perimeter of the following shapes



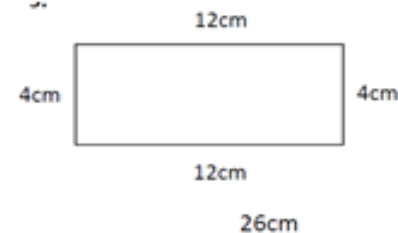
Challenge C

Tip: Step 1 – Add the length of all the sides together



$8\text{cm} + 8\text{cm} + 5\text{cm} = 21\text{cm}$ so
perimeter = 21cm

Task: Find the perimeter of the following shapes



Revision Screen Example

1. If 3m of wire costs 42p, How much will 5m cost?
2. Which shape has exactly $\frac{1}{3}$ shaded?



3. What is the length of the sides of the following shapes?
 - a) A square with perimeter 2m
 - b) An equilateral triangle with perimeter of 27cm
4. Write these numbers in the correct place in the sorting diagram

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