



Y6/7 Transition – Does Anything Actually Work?

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Aims of the Session



- Where we began
- Where we went right.....and wrong!
- The evidence we based our work on
- What we would like to do now

Let's start at the beginning..... Guidance Report training



Overview of Maths Guidance Report



- Set of 8 recommendations that, if implemented, will give you the best chance of success
- Nothing you won't have heard of – based in good quality teaching
- All the aspects included apply to KS2 and KS3

Eight Key Recommendations



1. Use assessment to build on pupils' existing knowledge and understanding

2. Use manipulatives and representations

3. Teach pupils strategies for solving problems

4. Enable pupils to develop a rich network of mathematical knowledge

5. Develop pupils' independence and motivation

6. Use tasks and resources to challenge and support pupils' mathematics

7. Use structured interventions to provide additional support

8. Support pupils to make a successful transition between primary and second.



Digging Deeper into the Guidance



- Part of Recommendation 4 – Enable Pupils to Develop a Rich Network of Mathematical Knowledge

Teach pupils that fractions and decimals extend the number system beyond whole numbers

What can this look like in YR – Y9?



Fractions and decimals extend the number system beyond whole numbers - YR



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Fractions and decimals extend the number system beyond whole numbers – Y1/2



- Transfer similar skills as YR but introduce some recording and notation

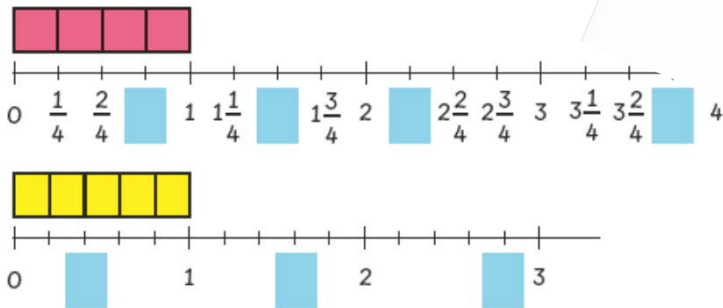


Fractions and decimals extend the number system beyond whole numbers – Y3/4

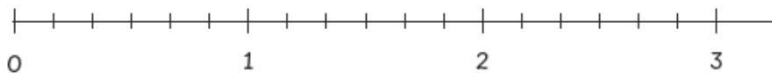


Guided Practice

1 What are the missing numbers?



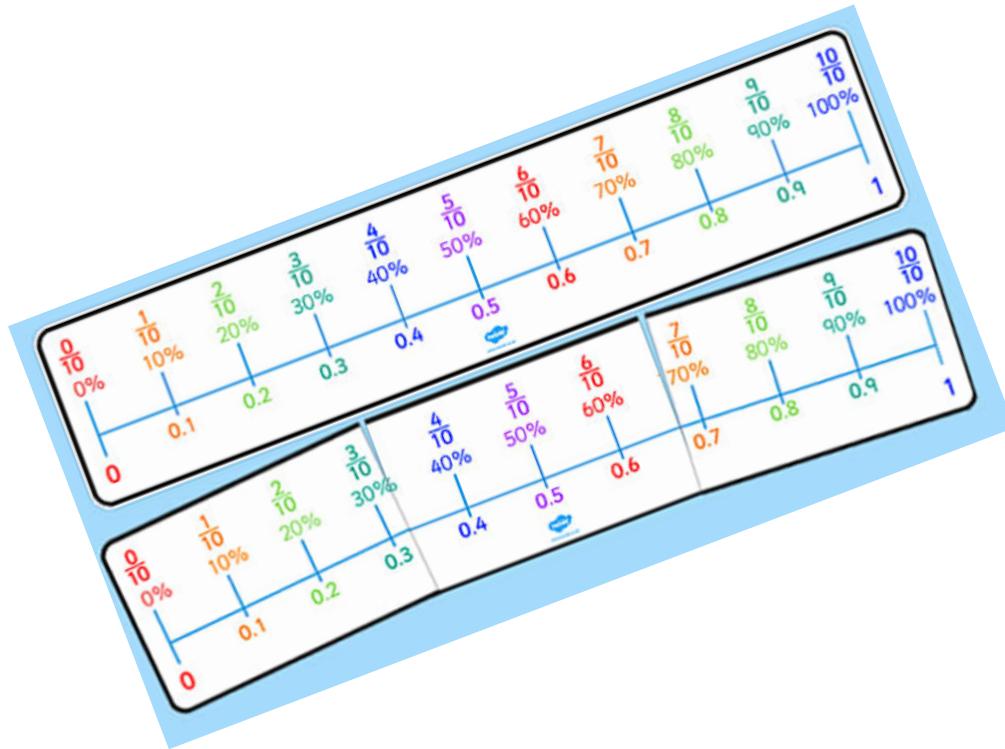
2 Show $1\frac{5}{6}$, $2\frac{1}{2}$, $2\frac{1}{3}$ and $1\frac{2}{3}$ on the number line.



Mind Workout

A metal ball is $\frac{3}{4}$ kg heavier than a rubber ball.
 The metal ball is 4 times as heavy as the rubber ball.
 What is the total mass of the metal ball and the rubber ball?

Fractions and decimals extend the number system beyond whole numbers – Y5/6



- Number lines comparing fractions, decimals and percentages that continue past 1.

Fractions and decimals extend the number system beyond whole numbers – **KS3**



- Percentages you get greater than 100
- You get a quarter free
- Link to written divisions $5/2 = 2.5$ in a bus stop method
- The fraction symbol can be interpreted as division

$$1.5 = \frac{3}{2} \text{ Ratio}$$

Rational

Irrational means **not Rational**

$$\pi = 3.14159... = \frac{?}{?} \text{ (No Ratio)}$$

Irrational

Fractions and decimals extend the number system beyond whole numbers



- Clearly see impact of eradicating the misconception at an early stage
- Stages are fluid – if they have not addressed this misconception it may need unpicking and re-addressing
- Understand the vocabulary at transition time to make sure the hard work pays off

What we learnt most from the course.....



Meanwhile....



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What we did next



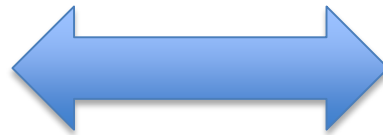
- We decided we would like to create opportunities for KS2/3 staff to work together
- Looked at the evidence base
- Approached possible partners
- Create networks across secondaries from slightly different regions
- Maintain enthusiasm

Evidence Review



- The evidence review is a longer document that evidences what works for particular mathematical topics and can be very useful for exploring your current work – what does work in this field and are we sticking to these core concepts?

Relationship to Mastery



- The content of the report is widely thought to dovetail with the mastery agenda
- Blog by Sir Kevan Collins around the relationship between the two

Transition – what does the Guidance Report say?

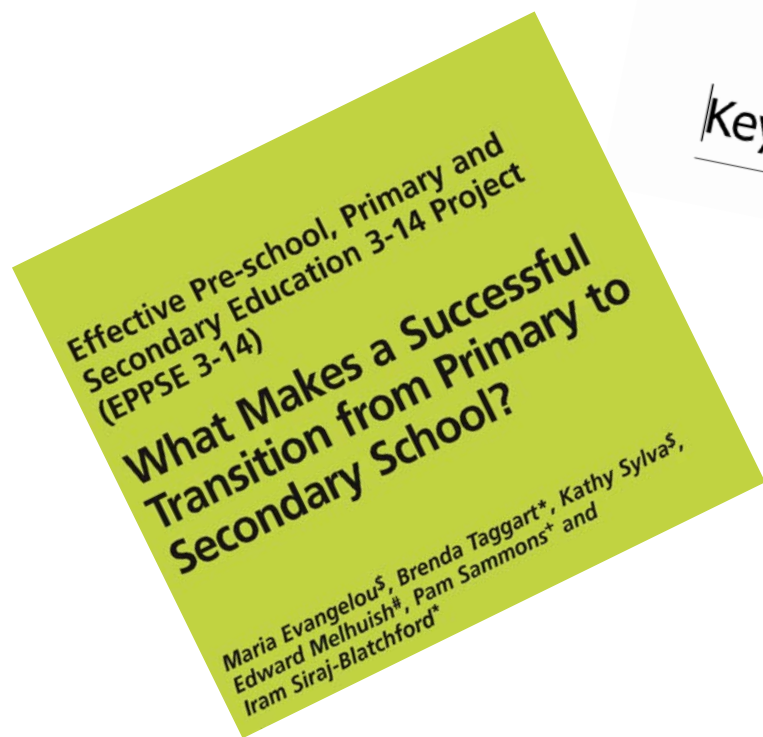


- Staff need to be familiar with the other KS
- You need to follow good practice in both schools
- Staff need to have a shared understanding of teaching and learning
- There needs to be a good understanding of what pupils can do when they enter KS3

What does other evidence say?



- Reflected on a mixture of papers



Key Stage 3: the wasted years?



Basis for our project



1. Teachers' knowledge of other key stage
2. Coherence of curriculum
3. Plan for academic transition
4. Ensuring depth/challenge
5. Reduced anxiety about classroom
6. Reduced cognitive load

Basis for our project



Outcomes for our project - Evaluation



- There were some striking outcomes – addressing our outcome measures
- However these are not yet impact on learners

Outcomes for our project – Future Possibilities



- The schools are really keen to continue the relationships they have been developing.
- We would like to explore the following areas:
 - Vocabulary
 - More focussed NCETM project
 - Representation policies
 - Improved coherence in curriculums

Thank you!



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