Flipping the Worksheet
Some alternative ideas

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Rationale

• ‘...learning mathematics is far more successful if learners are actively engaged, encouraged to think mathematically and to see links and connections.’

(http://stem.org.uk/rxzr)
Why this workshop?

• To share our experiences of using small-group activities as an alternative to the traditional worksheet
• To explore the benefits of using alternative resources instead of worksheets
• To give you the chance to try some activities
• To get feedback and generate new ideas
Different types of activity

- Grouping or matching
- Jigsaws (tarsia)
- Venn diagrams
- Multiple representations
Why use these activities?

• To move from passive to active learning
• To move from transmission to challenging teaching

Malcolm Swan, 2005
Improving Learning in Mathematics: challenges and strategies
Different topics

- Descriptive statistics
- Percentages
- Algebra
- Functions & graphs
- Straight Lines
- Calculus
- Notation and terminology
Sources

• National STEM centre
• Standards Unit Resources
• Own
• TES
• Studymaths
Try some!

- Think about pros and cons, adaptations, other ideas
Discussion and Questions

- Practicalities
- Feedback on different activities
- What makes a good activity?
- Improvements?
Why use these activities?

• To encourage productive group work
• To encourage discussion
• To increase student motivation
• To expose misconceptions
• To provide practice
• To break the ice
• To provide instant feedback
• They are mostly ‘self-marking’
Why use these activities?

• To enable students to think from their own perspective instead of being told the facts and formulas.

• To enable students to formulate their own ideas about concepts/terminology used as opposed to a more formulised way of learning statistical terminology.
Create your own resources

- Word
- Tarsia

Contact us

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Email us and we will send you links to the resources and copies of our own.