



Challenge Title: Game play? A mathematical game.

Challenge Area: World of Work

What will be the outcome of the Challenge activities?
Students will:

- Consider the design of some games that use an aspect of mathematics
- Look at board games, games of chance, shape sorters
- Look at games using counters, dice, spinners
- Design a game for a particular aspect of mathematics and aimed at a specific age/KS
- Produce the design brief and rules
- Could make a prototype and try with target audience
- Evaluate the game – discuss ways of evaluating the game

The MAIN Key Skills this challenge could demonstrate are:					
✓	✓	✓	✓	✓	✓
Communication	Application Of Number	Information Technology	Working With Others	Improving Own Learning And Performance	Problem Solving

Who is it aimed at? (Year Group or Key Stage): Could be adapted to any age group

What will the Student learn from this challenge? (What will they know, understand and be able to do as a result of the challenge?)
Students will:

- explore an area of mathematics in depth in order to produce the game
- consider the design of games from all angles
- work in groups so that some work on mathematics, some on design, types of materials, production costs

Outline of tasks for this challenge:	Resources needed
1. collect examples of a range of games, all types and ideas. Play games and evaluate in terms of learning, cost, design aspects.	Games from all students, in school, from other teachers/adults.
2. Group to divide up tasks – area of mathematics, age group, materials, costs. Data from major companies that make games. Decide on area of maths and age group.	Paper, ICT.
3. Design group comes up with range of ideas. Production group builds a prototype(s).	Card
4. Costs are discussed and considered. Model built. Rules are written and trailed with prototype.	
5. Game evaluated – ways of evaluating considered. Game adapted in light of evaluation.	
6. Final model is produced.	
7. Work of group could be presented in a variety of ways. Target group could play game and give feedback. Ideas and process could be videoed, photos taken and presentation produced. Written portfolio of the stages of the design and production.	
8.	