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| **Times table bingo** | | | |
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| Solving multiplication problems to play bingo | | | |
| **Subject(s):** Mathematics  **Approx time:** 25 - 40 minutes |  | | **Key words / Topics:**   * 2 times tables * 5 times tables * 10 times tables * Bingo * Multiplication * Problem solving |
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| **Suggested Learning Outcomes** |  | |  |
| * To multiply numbers together using the 2, 5- and 10-times tables. * To solve multiplication problems using mental arithmetic. * To use correct mathematical statements and terminology relating to multiplication problems. | | | |
| **Introduction** |  | |  |
| This is one of a set of resources developed to support the teaching of the primary national curriculum. They are designed to support the delivery of key topics within maths and science. This resource focusses on solving multiplication-based numeracy problems to play a game of bingo.  Can you answer each multiplication problem and win the game?! | | | |
| **Purpose of this activity**  In this activity learners will solve a series of multiplication problems read out by the teacher. They will use these answers to play bingo, with the aim being to complete their given card with their responses. This will improve and reinforce learners’ multiplication skills in a fun and engaging context.  This activity could be used as a starter activity covering learning from a previous lesson, a plenary activity reinforcing learning that has just taken place, or as one of several activities within a wider scheme of learning focussing on multiplication and division. | | | |
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| **Activity** |  | | **Teacher notes** |
| **Introduction (5-10 minutes)**  Teacher to explain that learners are going to play multiplication bingo and explain the rules.   * The teacher will read out a multiplication question. * Learners will work out the answer and see if they have it on their card. * If the answer is on their card then they should highlight it with a highlighter pen. * Once all numbers are highlighted on a learner’s card, they should shout BINGO! The first to do this is the winner!   The teacher presentation can be used to act as a visual aid when introducing the activity, and an example using one of the bingo cards on the slide can be shown.  **Playing multiplication bingo (20-30 minutes)**  Teacher to hand out the cards randomly to learners and hand out highlighter pens.  Teacher to randomly read out multiplication problems from the 2, 5- and 10-times table sheet. Learners to be given a few moments to work out each answer and check their card to see if they have the answer on it.  Learners to follow the instructions to play the game, shouting ‘bingo!’ if they complete their card. |  | | Learners could play in small teams, pairs or as individuals.  This is a game-based activity – the bingo aspect can be used to inject fun and competition into solving multiplication problems. For added competition the teacher could set a time limit on how long learners have to answer each question.  Learners who win each round of the game could be given a prize as a reward and an incentive to other learners.  **How to play multiplication bingo**  Players have won the game once all their numbers are covered/highlighted. As a variant, and to add extra winners, players could call horizontal or vertical lines as well as the full card.  Highlighter pens can be used to mark the cards, as these help the original number to remain legible. If the cards are to be re-used then they could be laminated and learners given plastic counters or chips to cover their numbers instead.  Once a learner calls, the teacher will need to check that they have correctly answered each problem to complete their card. If not, then the game continues until another winner is found. The game can be reset and re-played as many times as required to ensure that learners are confident in using the times tables being practiced.  Some learners may also find it beneficial to have a pen and paper nearby to help them to work out the answer to each question, particularly for lower ability learners or for more challenging multiplications.  **Example bingo cards**  The example cards provided in the teacher presentation are based on the 2, 5- and 10-times tables. 10 different cards have been provided, and more can be created as needed using the additional blank template. These can be printed onto card or paper. |
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| **Differentiation** |  | |  |
| **Basic** |  | | **Extension** |
| For low ability learners the majority of the questions asked could come from the simpler 2 times table, or by using the simpler multiplications contained within each times table. E.g. 2 x 2, 3 x 5 etc. They could also be allowed to perform the calculations on paper. |  | | Increase the difficulty by moving up to the more challenging 3, 4 and 8 multiplication tables.  Include word-based, addition, subtraction and division problems in the game.  Allow learners to write their own values into the bingo cards using the blank card provided. |
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| **Resources** |  | | **Required files** icon-docicon-pdficon-ppt |
| * Interactive whiteboard/projector screen * Printed bingo cards for each group, pair or individual learner * Highlighter pens or plastic counters to mark the numbers on the cards * Paper and/or exercise books |  | | Presentation – Times table bingo  icon-pdf Times table bingo cards  icon-pdf Times table bingo teacher call card |
| **Additional websites** |  | |  |
| * **Mental Arithmetic – Multiplication worksheets:** Free worksheet for the 2, 5- and 10-times tables. <http://www.mental-arithmetic.co.uk/2,5,10-x-Table.htm> * **Bitesize – Multiplying and dividing:** Learner guides and video clips to help develop knowledge, understanding and application of the 2, 5- and 10-times tables (and division methods). <https://www.bbc.co.uk/bitesize/topics/zqbg87h> * **The School Run - Teachers' tricks for multiplication:** Support for parents, teachers and learners regarding KS1 level multiplication methods. <https://www.theschoolrun.com/teachers-tricks-multiplication> | | | |
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| **Related activities (to build a full lesson)** |  | |  |
| **Starters** (Options)   * Recap the 2, 5- and 10-times tables * Quick-fire round of simple mental arithmetic questions to warm up the brain. | | **Extension** (Options)   * Repeat activity using more challenging problems, such as using the 3, 4 and 8 multiplication tables. * Include word-based, addition, subtraction and division problems in the game. * Repeat activity using word-based, addition, subtraction and division problems.   **Plenary**   * Review answers and any working out for each problem. * Self and peer assessment of responses. | |
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| **The Engineering Context** film |
| * Engineers are required to use mathematics knowledge and skills regularly as part of their everyday job. For example, calculating the strength of a material, the speed of a vehicle, the sizes of products or quantities of parts needed. |

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| **Curriculum links** | | |
| **England: National Curriculum**  Mathematics  KS1 Year 2 Number – multiplication and division:   * recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers * calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs * solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts. | | **Northern Ireland Curriculum**  KS1 Number:   * understand the operations of addition, subtraction, multiplication and division and use them to solve problems * know the majority of multiplication facts up to 10 x 10. |
| **Scotland: Curriculum for Excellence**  Numeracy and Mathematics  Number and number processes:   * MNU1-03a | | **Wales: National Curriculum**  Mathematics  KS2 - Using number skills:   * recall 2, 3, 4, 5 and 10 multiplication tables and use to solve multiplication and division problems * multiply numbers by 10. |
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| **Assessment opportunities** | | |
| * Informal teacher assessment of responses. | | |
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