THIRD SPACE LEARNING

Ultimate Times Tables

Teacher notes for Year 3 games and activities

Year 3

Overview

Activity	Individual activity	Pairs activity	Small group activity	Whole class activity	Resources needed
1) Paired Up		×			• Resource 1
2) Picture Perfect		×			• Paper • Colour pens
3) Terrible Twenty-Eight				×	• Mini whiteboards
4) Four Duel		×			• One pack of playing cards per pair
5) Bingo, Bingo				×	• Mini whiteboards
6) Doubling Snake			×	×	• Mini whiteboards
7) What's the Link?			×		
8) Two, Four, Eight, Roll		×			• A large space • One football per pair
9) Threes in the Middle				×	• Resource 2
10) Three Hold Up		×		×	• Resource 3
11) Claim the Threes		×			• A pack of playing cards

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Activity	Individual activity	Pairs activity	Small group activity	Whole class activity	Resources needed
12) Find the Cheese		×			• Resource 4 per pair • One die per pair • One counter per pupil
13) Inverted Bingo				×	• Mini whiteboards
14) Facts on the Wall		×		×	• Resource 3 per pair • Blu tack (or similar) • Large space
15) Pop, Bang, Sparkle				×	
16) Squares		×			• Resource 5 • Counters

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Paired Up

Focus: Counting in and recognising multiples of 2, 5 and 10.

Aim: Collect the most pairs of cards.

Resources:

- Resource 1

Instructions:

1. Pupils place the cards face down on their table with the answers on one half of the table and the question on the other half.

2. They then take it in turns to turn over one question and one answer card. If they match, they keep the cards. If they don't match, they put them back.

Key questions:

- Which card are you looking for? How do you know?

Extension:

- Turn over a question card, say the answer you are looking for.
- OR turn over the answer card, say the question you are looking for.

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Picture Perfect

Focus: Counting in and recognising multiples of 2, 5 and 10.

Aim: Draw a picture that reflects a multiplication calculation of your choice.

Instructions:

1. Discuss how to show different calculations (using arrays, groups, sets etc).
2. Pupils to pick a 'secret fact' from the 2, 5 or 10 times tables to draw. When they have finished, swap their picture with a partner and see if their partner can guess what their secret fact was.

Key questions:

- How do you identify the fact that has been represented?
- Could the picture represent different multiplication facts? How?

Extension:

- Can you show your calculation in the form of an array / in groups / in a sequence?

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Terrible Twenty-Eight

Focus: Rapid recall of multiplication facts for the four times table.

Aim: Predict who will say 28 in each round.

Resources:

- Mini whiteboards

Instructions:

1. Stand the whole class in a circle with whiteboards. Go round the circle, saying the four times tables from 0 to 12 (multiplier x 4 = product) forwards then backwards.

2. Whoever says 7 x 4 = 28 is out. When this happens, the whole class (including anyone who is out) predicts who will be out next and write the name on their whiteboard.

3. There will be two winners: the final person standing and the person who has correctly predicted who will be out the most times.

Key questions:

- Which fact will you say? Which fact comes next?

Extension:

- Change the 'terrible' number.
- Use division facts instead of multiplication facts.

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Four Duel

Focus: Rapid recall of multiplication facts for the four times table.

Aim: Rapid recall of multiplication facts for the four times table.

Resources:

- A pack of playing cards per pair

Instructions:

1. Pairs take it in turns to reveal a card. They then race to multiply the number on the card by 4. Ace = 1, Jack = 11 and Queen or King = 12.

2. Whoever says the correct fact first and puts their hand on the card, wins.

Key questions:

- Remove the joker from the packs before playing.
- What strategy can you use to multiply by 4?
- How can you find the answer quicker?

Extension:

- Try giving two or three four times table facts before claiming the card. (e.g. card shows 2. 2 x 4 = 8, 4 x 2 = 8, 8 ÷ 4 = 2, 8 ÷ 2 = 4)

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Bingo, Bingo

Focus: Doubling numbers up to 25.

Aim: Be the first to cross off all of your numbers.

Resources:

- Mini whiteboards

Instructions:

1. Tell pupils to write down five even numbers between 2 and 50 on their whiteboards.
2. Call out a series of numbers. If the number said when doubled is one of the numbers on the pupil's whiteboard, they can cross it off (encourage them not to rub them off so they can prove their answers are correct).
3. When all five numbers are crossed out, they shout bingo.

Key questions:

- Which number was said when you crossed out [number]?
- How is doubling linked to times tables?

Extension:

- Play the game again but with double, double. (e.g. you say a number between 1 and 13, the pupils double the number and double it again.)

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Double Snake

Focus: Fluency in doubling numbers.

Aim: Double the initial number given as quickly as you can.

Resources:

- Mini whiteboards

Instructions:

1. Arrange the pupils into groups of 3 or more, one standing in front of another.
2. Say a number. The pupils need to continually double the number and pass the whiteboard back.
3. When the final person has written the doubled number, they hold up their whiteboard to show they're finished.

Key questions:

- What strategy did you use?
- How do you double larger numbers?
- Are the different positions in the snake linked to any multiplication facts?

Extension:

- Start with larger numbers.

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What's the Link?

Focus: Investigate and explore links between the 2, 4 and 8 times table.

Aim: Find and explain links between different times tables.

Instructions:

1. Introduce this idea: Evie says, "I think my 4 times table is linked to my 8 times table.".

2. Pupils discuss this and share their ideas in groups / as a class. Then show how the 2, 4 and 8 times tables are linked.

Key questions:

- How are the 2 times tables linked?
- How does this make it easier to solve the 8 times tables?
- Are division facts for the 4 and 8 times tables linked in the same way?

Extension:

- Explore the links between other times tables (e.g. 10s and 5s or 10s and 2s.)

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Two, Four, Eight, Roll

Focus: Recall the 2, 4 and 8 times tables.

Aim: Multiply by 2 then 4 then 8 before the ball reaches you.

Resources:

- A large space; one football per pair

Instructions:

1. Pupils sit opposite each other with one ball per pair.

2. One partner will start by saying a two times table fact then rolling the ball. Before the ball has reached them, the other partner says the related four times table fact. Finally, the first partner says the related eight times table fact. Then the partners move closer together and repeat.

3. If the ball reaches someone before they've said a fact, the other person gets a point. If someone makes a mistake, the other person gets a point.

Key questions:

- Can you complete a full match (i.e. 1 - 12 x 2) without anyone gaining a point?
- How are the 2, 4 and 8 times tables linked?

Extension:

- Add group points - you score each time you respond quickly / don't make a mistake but lose a point if you make a mistake/ don't respond quickly enough.

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Threes in the Middle

Focus: Recall multiplication and division facts for the 3 times tables.

Aim: Say multiplication and division facts for a multiple of three.

Resources:

- A medium size area; resource 2

Instructions:

1. Give each pupil a card. Tell pupils to move around the space.
2. When you say 'meet', pupils need to find a partner.
3. Pupils look at each other's card and say a division fact from the three times table linked to their partner's card. When both partners have said a division fact, they swap cards and find a new partner.

Key questions:

- How many multiplication or division facts can you think of for the number your partner has?
- Which numbers are easier to meet? Why?

Extension:

- Give all the related facts before you move on.

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Three Hold Up

Focus: Counting forwards and backwards in and recognising multiples of 3.

Aim: Be the first pair to create an answer and get to six points.

Resources:

- Resource 3

Instructions:

1. Say a multiplication or division question related to the three times table.
2. In partners, pupils need to calculate the answer and use the digit cards to create the answer and hold it up.
3. The first five correct answers get a point. The first team to get six points wins.

Key questions:

- How did you find your answer?
- How do you know your answer is correct?
- Can you show this using an array?

Extension:

- Which other facts are related to the given question?

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Claim the Threes

Focus: Counting forwards and backwards and recognising multiples of 3.

Aim: Say the related division facts.

Resources:

- A pack of cards each

Instructions:

1. Partners should deal the cards between them (Ace = 1, Jack = 11, Queen and King = 12).

2. Partners take it in turns to reveal a card and multiply the number shown by 3. Whoever says the correct calculation first and puts their hand on the card wins the card. If someone makes a mistake, the other person gets the card.

Key questions:

- Which division fact is linked to this number? How do you know?
- Is there more than one possible answer?

Extension:

- Say all the related three times table facts.

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Find the Cheese

Focus: The 2, 3, 4, 5, 8 and 10 times tables and the related division facts.

Aim: Get your mouse (counter) to the cheese first.

Resources:

- Resource 4 per pair; a dice per pair; one counter per pupil

Instructions:

1. Take it in turns to roll the die and move the number indicated.
2. Pupils then answer the question on the space or follow the instructions.
3. The winner is the first person to get their counter on the cheese space first.

Key questions:

- How can you check your partner's answers?
- Can you draw any pictures to help you?
- Are there any other facts linked to the fact you have landed on?

Extension:

- Give all the related facts to the fact landed on.

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Inverted Bingo

Focus: Related division facts for the 2, 3, 4, 5, 8 and 10 times tables.

Aim: Be the first to cross off all your numbers.

Resources:

- Mini whiteboards

Instructions:

1. Tell pupils to write down five even numbers between 1 and 12 on their whiteboards.

2. Call out a series of division calculations for the 2, 3, 4, 5, 8 and 10 times tables. If the answer is one of the numbers on the pupil's whiteboard, they can cross it off (encourage them not to rub them off so they can prove their answers are correct).

3. When all five numbers are crossed out, they shout bingo.

Key questions:

- Vary your language when giving questions e.g. use divided by, groups of
- How many questions could I ask that would give you the answer [number]?

Extension:

- Play the game in a small group with one of the members being the caller.

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Facts on the Wall

Focus: Recognise and use multiplication and division facts for the 2, 3, 4, 5, 8 and 10 times tables.

Aim: Answer the questions to get to 15 points first.

Resources:

- One set of resource 3 per pair; blu tack (or similar); large space

Instructions:

1. Call out multiplication facts for the 2, 3, 4, 5, 8 and 10 times tables. Pupils need to use the digit cards to represent the answer.
2. One at a time, they take the a single digit to the other side of the room to show the answer.
3. Each pair with a correct answer gets a point. The first pair to get 15 points wins.

Key questions:

- Which method will you use to find the answer?
- Which facts are easier to remember?

Extension:

- Call out division and multiplication facts.

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Pop, Bang, Sparkle

Focus: Identifying multiples of 3, 4 and 10.

Aim: Don't say any multiple of 3, 4 or 10.

Instructions:

1. Count from 0 to a number of your choice.
2. Instead of saying a multiple of 3, say pop. Instead of saying a multiple of 4, say bang. If the number is a multiple of 3 and 4, say pop bang. When that is secure, replace multiples of 10 with sparkle. For multiples of 3, 4 and 10, pop, bang, sparkle is said.

Key questions:

- What do you notice about the numbers being replaced?
- Are there more pops or bangs?
- Would we ever say pop, bang, sparkle?

Extension:

- Change the multiples that you replace with pop, bang, sparkle.

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Squares

Focus: Recognise and use multiplication and division facts for the 2, 3, 4, 5, 8 and 10 times tables.

Aim: Place your counters so that they form the vertices of a square (of any size).

Resources:

- Resource 5; counters

Instructions:

1. To claim a space, pupils need to say a multiplication fact where the product is the number on the space they are claiming. If they say an incorrect fact, they cannot claim the space.
2. A pupil wins when they have all four vertices of a square.

Key questions:

- Can you explain your strategy?
- Which square was the easiest to secure?

Extension:

- Make your own large game board that incorporates more times tables.

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