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Dice and card games to support maths fluency at home

Flip and Add or Subtract One
All you have to do is take out the face cards, then put the deck on the table facing down. Flip the card on the top. If it's red, add one, if it's black, subtract one.
If you get the correct answer, you keep the card.
You can adapt this card game to your child's age. For instance, they could add or subtract any number or they could multiply and divide.

Number Bond Cards
Take the ten, jack, queen, king and joker cards out of the pack.
Shuffle the remaining cards and place them face up.
Choose a target number, for example 9. Find pairs of cards that total the target number.
This can be played by x the cards too.

What's missing?
Use a set of 6 cards which follow each other in order (for example: 2, 3, 4, 5, 6, 7).
Player 1 places the cards in order without player 2 looking but leaves out one card (for example 2, 3, 5, 6, 7)

Clock patients - great for supporting telling the time
https://www.youtube.com/watch?v=VocomfGUwOs

Shut the Box
Lay out number cards 1-10. Players roll one or two dice and turn over number cards (1-10) that match or sum to the total on the dice.

Multiplication / addition Madness/War
Roll two dice and multiply / add the numbers; the highest product wins a point.

Dice Battle- first to 10, 20, 100
Roll 1 or 2 dice, keep a running total until you reach your target number to be the winner.

Higher or lower
Turn over a card and take it in turns to predict if the next card will be higher (more) or lower (less). If you are right, you keep the cards. The person with the most cards at the end wins.

Snap
Share out a pack of cards between the players. Take it in turns to turn over the card, if they match, you win the cards. The winner is the person with all the cards at the end of the game- this helps with pattern spotting, number recognition and subitising.

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Key Instant Recall Facts
Year 2 - Autumn 1

I know number bonds for each number to 20.

By the end of this half term, children should know the following facts. The aim is for them to recall these instantly.

0 + 20 = 20	20 + 0 = 20	20 – 0 = 20	20 – 20 = 0
1 + 19 = 20	19 + 1 = 20	20 – 1 = 19	20 – 19 = 1
2 + 18 = 20	18 + 2 = 20	20 – 2 = 18	20 – 18 = 2
3 + 17 = 20	17 + 3 = 20	20 – 3 = 17	20 – 17 = 3
4 + 16 = 20	16 + 4 = 20	20 – 4 = 16	20 – 16 = 4
5 + 15 = 20	15 + 5 = 20	20 – 5 = 15	20 – 15 = 5
6 + 14 = 20	14 + 6 = 20	20 – 6 = 14	20 – 14 = 6
7 + 13 = 20	13 + 7 = 20	20 – 7 = 13	20 – 13 = 7
8 + 12 = 20	12 + 8 = 20	20 – 8 = 12	20 – 12 = 8
9 + 11 = 20	11 + 9 = 20	20 – 9 = 11	20 – 11 = 9
10 + 10 = 20		20 – 10 = 10	

Key Vocabulary

What do I **add** to 5 to make 20?
What is 20 **take away** 6?
What is 3 **less than** 20?
How many **more than** 16 is 20?

They should be able to answer these questions in any order, including missing number questions e.g. 19 + □ = 20 or 20 – □ = 8.

Top Tips

The secret to success is practising little and often. Use time wisely. Can you practise these KIRFs while walking to school or during a car journey? You don't need to practise them all at once: perhaps you could have a fact of the day. If you would like more ideas, please speak to your child's teacher.

Use what you already know – Use number bonds to 10 (e.g. 7 + 3 = 10) to work out related number bonds to 20 (e.g. 17 + 3 = 20).

Use practical resources – Make collections of 20 objects. Ask questions such as, "How many more conkers would I need to make 20?"

Make a poster – We use Numicon at school. You can find pictures of the Numicon shapes here: bit.ly/NumiconPictures – your child could make a poster showing the different ways of making 20.

Play games – You can play number bond pairs online at https://www.bbc.co.uk/bitesize/articles/zdjkjfr and then see how many questions you can answer in just one minute.

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Key Instant Recall Facts
Year 2 - Autumn 2

I know the multiplication and division facts for the 2 times table.

By the end of this half term, children should know the following facts. The aim is for them to recall these instantly.

2 × 1 = 2	2 ÷ 2 = 1
2 × 2 = 4	4 ÷ 2 = 2
2 × 3 = 6	6 ÷ 2 = 3
2 × 4 = 8	8 ÷ 2 = 4
2 × 5 = 10	10 ÷ 2 = 5
2 × 6 = 12	12 ÷ 2 = 6
2 × 7 = 14	14 ÷ 2 = 7
2 × 8 = 16	16 ÷ 2 = 8
2 × 9 = 18	18 ÷ 2 = 9
2 × 10 = 20	20 ÷ 2 = 10
2 × 11 = 22	22 ÷ 2 = 11
2 × 12 = 24	24 ÷ 2 = 12

Key Vocabulary

What is 2 **multiplied** by 7?
What is 2 **times** 9?
What is 12 **divided** by 2?

They should be able to answer these questions in any order, including missing number questions e.g. 2 × □ = 8 or □ ÷ 2 = 6.

Top Tips

The secret to success is practising little and often. Use time wisely. Can you practise these KIRFs while walking to school or during a car journey? You don't need to practise them all at once: perhaps you could have a fact of the day. If you would like more ideas, please speak to your child's teacher.

Songs and Chants – You can buy Times Tables CDs or find multiplication songs and chants online. If your child creates their own song, this can make the times tables even more memorable.

Use what you already know – If your child knows that 2 × 5 = 10, they can use this fact to work out that 2 × 6 = 12.

Test the Parent – Your child can make up their own tricky division questions for you e.g. What is 18 divided by 2? They need to be able to multiply to create these questions.

Use memory tricks – For those hard-to-remember facts, www.multiplication.com has some strange picture stories to help children remember.

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Key Instant Recall Facts
Year 2 - Spring 1

I know doubles and halves of numbers to 20.

By the end of this half term, children should know the following facts. The aim is for them to recall these instantly.

0 + 0 = 0	½ of 0 = 0	
1 + 1 = 1	½ of 2 = 1	11 + 11 = 22
2 + 2 = 4	½ of 4 = 2	12 + 12 = 24
3 + 3 = 6	½ of 6 = 3	13 + 13 = 26
4 + 4 = 8	½ of 8 = 4	14 + 14 = 28
5 + 5 = 10	½ of 10 = 5	15 + 15 = 30
6 + 6 = 12	½ of 12 = 6	16 + 16 = 32
7 + 7 = 14	½ of 14 = 7	17 + 17 = 34
8 + 8 = 16	½ of 16 = 8	18 + 18 = 36
9 + 9 = 18	½ of 18 = 9	19 + 19 = 38
10 + 10 = 20	½ of 20 = 10	20 + 20 = 40

Key Vocabulary

What is **double** 9?
What is **half** of 14?

Top Tips

The secret to success is practising little and often. Use time wisely. Can you practise these KIRFs while walking to school or during a car journey? You don't need to practise them all at once: perhaps you could have a fact of the day. If you would like more ideas, please speak to your child's teacher.

Use what you already know – Encourage your child to find the connection between the 2 times table and double facts.

Ping Pong – In this game, the parent says, "Ping," and the child replies, "Pong." Then the parent says a number and the child doubles it. For a harder version, the adult can say, "Pong." The child replies, "Ping," and then halves the next number given.

Practise online – Go to https://www.bbc.co.uk/bitesize/articles/zdjkjfr and see how many questions you can answer in just 90 seconds.

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Key Instant Recall Facts
Year 2 - Spring 2

I know the multiplication and division facts for the 10 times table.

By the end of this half term, children should know the following facts. The aim is for them to recall these instantly.

10 × 1 = 10	10 ÷ 10 = 1
10 × 2 = 20	20 ÷ 10 = 2
10 × 3 = 30	30 ÷ 10 = 3
10 × 4 = 40	40 ÷ 10 = 4
10 × 5 = 50	50 ÷ 10 = 5
10 × 6 = 60	60 ÷ 10 = 6
10 × 7 = 70	70 ÷ 10 = 7
10 × 8 = 80	80 ÷ 10 = 8
10 × 9 = 90	90 ÷ 10 = 9
10 × 10 = 100	100 ÷ 10 = 10
10 × 11 = 110	110 ÷ 10 = 11
10 × 12 = 120	120 ÷ 10 = 12

Key Vocabulary

What is 10 **multiplied** by 3?
What is 10 **times** 9?
What is 70 **divided** by 10?

They should be able to answer these questions in any order, including missing number questions e.g. 10 × □ = 80 or □ ÷ 10 = 6.

Top Tips

The secret to success is practising **little** and **often**. Use time wisely. Can you practise these KIRFs while walking to school or during a car journey? You don't need to practise them all at once: perhaps you could have a fact of the day. If you would like more ideas, please speak to your child's teacher.

Pronunciation – Make sure that your child is pronouncing the numbers correctly and not getting confused between thirt**een** and thirt**y.**

Songs and Chants – You can buy Times Tables CDs or find multiplication songs and chants online. If your child creates their own song, this can make the times tables even more memorable.

Test the Parent – Your child can make up their own tricky division questions for you e.g. *What is 70 divided by 7?* They need to be able to multiply to create these questions.

Apply these facts to real life situations – How many toes are in your house? What other multiplication and division questions can your child make up?

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Key Instant Recall Facts
Year 2 - Summer 1

I can tell the time.

By the end of this half term, children should know the following facts. The aim is for them to recall these instantly.

Children need to be able to tell the time using a clock with hands. This target can be broken down into several steps.

I can tell the time to the nearest hour.

I can tell the time to the nearest half hour.

I can tell the time to the nearest quarter hour.

can tell the time to the nearest five minutes.

Key Vocabulary

Twelve **o'clock**
Half past two
Quarter past three
Quarter to nine
Five past one
Twenty-five to ten

They should be able to answer these questions in any order, including missing number questions e.g. 10 × □ = 80 or □ ÷ 10 = 6.

Top Tips

The secret to success is practising little and often. If you would like more ideas, please speak to your child's teacher.

Talk about time - Discuss what time things happen. When does your child wake up? What time do they eat breakfast? Make sure that you have an analogue clock visible in your house or that your child wears a watch with hands.

Ask your child the time regularly – You could also give your child some responsibility for watching the clock :
"The cakes need to come out of the oven at quarter past four."
"We need to leave the house at half past eight."

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Key Instant Recall Facts
Year 2 - Summer 2

I know the multiplication and division facts for the 5 times table

By the end of this half term, children should know the following facts. The aim is for them to recall these instantly.

5 × 1 = 5	5 ÷ 5 = 1
5 × 2 = 10	10 ÷ 5 = 2
5 × 3 = 15	15 ÷ 5 = 3
5 × 4 = 20	20 ÷ 5 = 4
5 × 5 = 25	25 ÷ 5 = 5
5 × 6 = 30	30 ÷ 5 = 6
5 × 7 = 35	35 ÷ 5 = 7
5 × 8 = 40	40 ÷ 5 = 8
5 × 9 = 45	45 ÷ 5 = 9
5 × 10 = 50	50 ÷ 5 = 10
5 × 11 = 55	55 ÷ 5 = 11
5 × 12 = 60	60 ÷ 5 = 12

Key Vocabulary

What is 5 **multiplied** by 7?
What is 5 **times** 9?
What is 60 **divided** by 5?

They should be able to answer these questions in any order, including missing number questions e.g. 5 × □ = 40 or □ ÷ 5 = 9.

Top Tips

The secret to success is practising little and often. Use time wisely. Can you practise these KIRFs while walking to school or during a car journey? You don't need to practise them all at once: perhaps you could have a fact of the day. If you would like more ideas, please speak to your child's teacher.

Songs and Chants – You can buy Times Tables CDs or find multiplication songs and chants online. If your child creates their own song, this can make the times tables even more memorable.

Spot patterns – What patterns can your child spot in the 5 times table? Are there any similarities with the 10 times table?

Test the Parent – Your child can make up their own tricky division questions for you e.g. What is 45 divided by 5? They need to be able to multiply to create these questions.

Use memory tricks – For those hard-to-remember facts, www.multiplication.com has some strange picture stories to help children remember.