

# INSPIRE MATHS GAMES PACK for PUPIL BOOKS 1A and 1B



# Inspire Maths games pack for use with pupil books IA and IB

This pack includes games from *Inspire Maths* Pupil Books IA and IB to use at home to reinforce maths taught at school.

#### The benefits of playing games

Play is important and we know that it is essential for cognitive growth. We are all aware of how crucial this is in the early years, but games can provide experience beyond early childhood and into the teens and indeed adulthood. As well as contributing to cognitive growth, play also contributes to social, emotional and wellbeing in children and adults alike.

Until now there have been a variety of factors that have influenced how children play and the time we put aside to play. Some of these can be attributed to a hurried life style, changes in family structures, families not living in family groups where other family members such as grandparents are accessible, the move towards social media and parents' fear of allowing children to play outside with friends. However in these unprecedented times we find ourselves in currently, in many ways, life has slowed down; children are playing together and of course parents have more time at home with the family and they are looking for activities and games to play.

Playing games teach children how to take turns, be patient, understand that winning is not the important thing. Games can be educational and fun. Playing games can give us a feeling of success and resilience, which can translate into other areas of our lives. Play gives adults the space to communicate with their children and vice versa. Games encourage children to play together and be sociable. Games can also teach children (and adults) patience and understanding. Playing games can also help to develop children's attention spans.

# Using Inspire Maths games and activities for problem solving and fluency practice

These engaging games and activities encourage children to apply concepts they have been learning at school. These games and activities provide a context for engaging children with opportunities for frequent practice. Through playing games with others, children develop a variety of important skills such as critical thinking, problem solving, creativity and teamwork.

Playing these games can lay the foundation for understanding mathematics. Children practise using mathematical language in context. They can also practise essential life skills such as telling the time and using and manipulating money. Playing a game may help them understand a new concept or look at something with a different perspective to develop their understanding further.

#### Hit IO! Numbers to IO



Players: 3

6 Hit 10!

How to play: Take turns to count on by I, 2 or 3. Count on to I0.

- Player I starts counting from I.
- 2 Player 2 counts on.





3 Player 3 counts on.





The player who says 10 wins!

Practice Book IA, p.5

# Hit IO! Numbers to IO

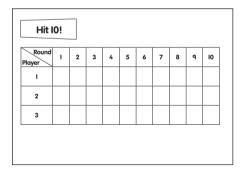
Hit 10!

Round Player	I	2	3	4	5	6	7	8	9	10
1										
2										
3										

# Hit IO! Numbers to IO

#### What you will need

A copy of the recording sheet



#### How to play

Play in twos or threes.

Take turns in counting on in groups of I, 2 or 3.

The first person to reach and say 10 is the winner.

Ask your children to show their fingers whilst counting on.

Eventually ask them to share their strategies.

#### **Example with 3 players**

Player I (starts): I, 2 (using 2 fingers)

Player 2 (continues): 3, 4, 5 (using 3 fingers)

Player 3 (carries on): 6, 7, 8 (using 3 fingers)

Player I (wins): 9, 10 (using 2 fingers)

#### What's hidden? Subtraction within 10



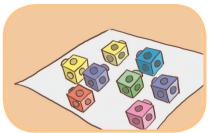
What's hidden?

Players: 3 to 4 You will need: I0 cubes

How to play:

Player I chooses a number of and shows them to the other players.

Then player I 2 hides some of the





The other players write 3 the number of player I hid by counting on.

Player I checks their answers. Players get one point for each correct answer. Take turns to play. Correct!







Play four rounds. The player with the most points wins.

#### What's Hidden? Subtraction within 10

#### What you will need

Each player will need 10 cubes, beads, buttons or shells.

#### How to play

You will be asking the children to analyse parts and whole. The whole is the 10 cubes, so the two parts here are 5 and 3.

Ask the children to think of different ways to use the term 'less than' to describe numbers, for example 2 is 3 less than 5 and 3 less than 5 is 2.

Introduce the 'less than' concept in subtraction, using cubes.

Start with 6 cubes and then take away 2 to get 4. Explain that 2 less than 6 is 4.

To solve this problem in the illustration, start with 8 cubes and then take away 5 to get 3. Explain that 5 less than 8 is 3.



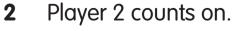
Players: 3

3 Hit 20!

How to play:

Take turns to count on by I, 2 or 3. Count to 20.

I Player I starts counting 2 from I.







3 Player 3 counts on.





The player who says 20 wins!

# Hit 20! Numbers to 20

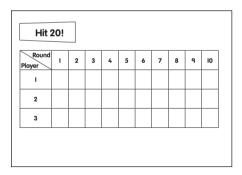
Hit 20!

Round Player	I	2	3	4	5	6	7	8	9	10
1										
2										
3										

# Hit 20! Numbers to 20

#### What you will need

A recording sheet



#### How to play

Play in twos or threes. Take turns in counting on in groups if I, 2 or 3. The first person to reach and say 20 is the winner. Ask your children to show their fingers whist counting on. Eventually ask them to share their strategies.

#### **Example with 3 players:**

Player I (starts): I, 2 (using 2 fingers)

Player 2 (continues): 3, 4, 5 (using 3 fingers)

Player 3 (carries on): 6, 7, 8 (using 3 fingers)

Play continues until someone reaches 20. Suggest that it is a good idea to vary the amount of fingers they use and to try to think ahead.

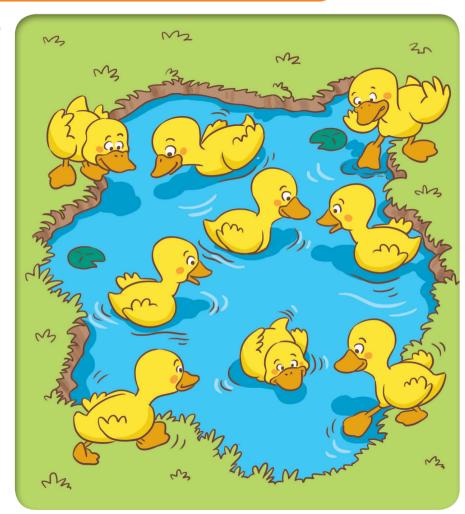
# Making up addition stories. Addition within 10

# Let's Learn!

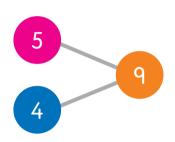


# Making up addition stories





There are 5 ducks in a pond. 4 ducks get into the pond. There are 9 ducks altogether.



5 + 4 = 9

# Making up addition stories. Addition within 10

#### What you will need

10 cubes, buttons or plastic ducks.

#### How to use this activity

Ask your children to look at the picture.

Tell a story about the ducks in the picture.

Use cubes/buttons/shells to represent the ducks and write the addition sentence. If you have enough plastic ducks even better.

You can make a pond and place them in or outside the pond.

Emphasise the statements used in storytelling, and relate them to the concepts learnt such as 'adding on' and 'part-whole'. The whole here is 9 ducks. The two parts could be 4 and 5; 5 ducks in the pond and 4 ducks on the bank.

Make addition stories based on different pictures and situations.

# **Add mentally! Mental calculations**



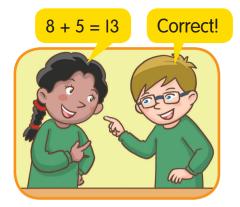
Add mentally!

How to play:

Player I takes a card from each set.



**3** The other players check the answer.



Players: 2 to 4 You will need:

- a set of cards with numbers 4, 5, 6, 7, 8 and 9
- a set of cards with numbers 6, 7, 8 and 9

2 Player I adds the two numbers mentally.



You get I point for each correct answer.Take turns to play.

The first player to get 5 points wins!

Practice Book IC, p.81

# **Add mentally! Mental calculations**

#### What you will need

You will need two sets of cards. One set numbered 4 to 9 and the other set of cards numbered 6 to 9. These can be numbers written on cards or use playing cards.

#### How to play

This game is for between two and four players. Player one takes a card form each set and adds the two numbers together mentally. Player two/the other players check their answer. Children will be practising adding two one digit numbers. They will be making groups of ten. You may want to ask the children to say the number in two different ways and write it down.

For example: 5 + 7 = 12. Five add seven makes twelve or five ones add seven ones makes 12 ones. Five ones add seven ones makes one ten and two ones.

# **Subtract mentally! Mental calculations**



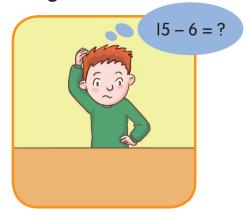
Subtract mentally!

How to play:

Player I takes a card from the set.



3 Next they subtract the smaller number from the greater number.



The first player to get 5 points wins!

Players: 2 to 4 You will need:

- a spinner with numbers 0 to 9
- a set of cards with numbers
- Then they spin the spinner once to get another number.



4 The other players check the answer. You get I point for each correct answer. Take turns to play.



Practice Book IC, p.83

# **Subtract mentally! Mental calculations**

#### What you will need

You will need a set of cards with numbers II to I9 and a spinner with numbers 0 to 9. You can make a spinner by drawing on a dinner plate and drawing 9 sections with felt tip. Place a paper clip at the centre of the plate and put the point of a pencil through the end of the paper clip which is at the centre of the plate. Spin the paper clip to generate the numbers. If you do not have paper clips you can make an arrow out of a piece of card and do the same thing.

#### How to play

In this game, your children will be subtracting a one digit number from a two digit number that is less than 20. You might want to ask them to talk about how subtraction relates to their number bonds. For example: 12 - 9 = 3 and 9 + 3 = 12.



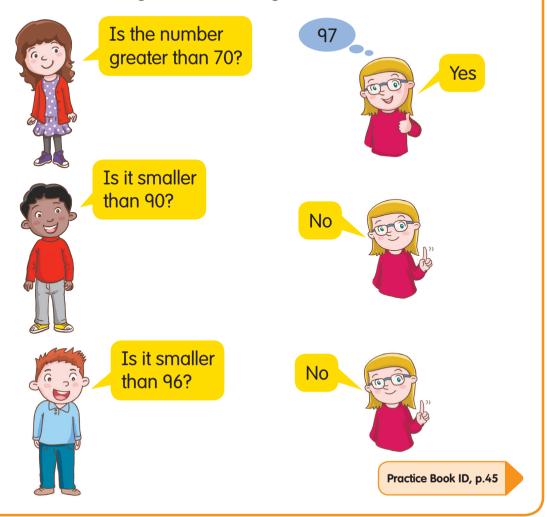
What's my number?

How to play:

- I Think of a number between 50 and 100.
- 2 The other players take turns to ask you questions to find the number.

Players: 2 to 4

- **3** You can answer only **Yes** or **No** to the questions.
- 4 See who guesses the right number first!



# What's my number? Numbers to 100

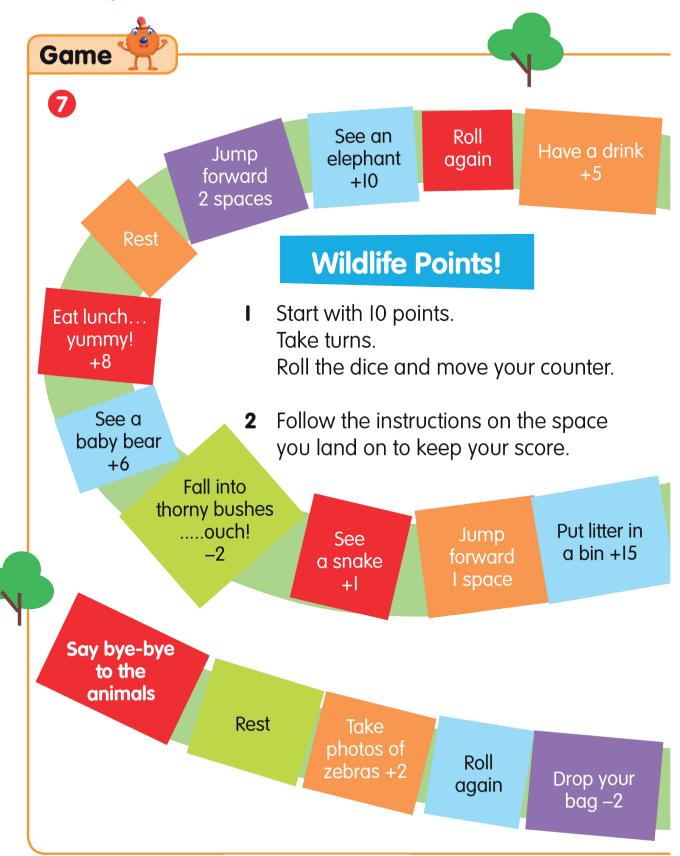
# What you will need

You will not need anything to play this game and you could play it with more than two people, which will require each player to listen to the other player's questions and the answers. If you play with more than two people the first person to work out the correct number wins.

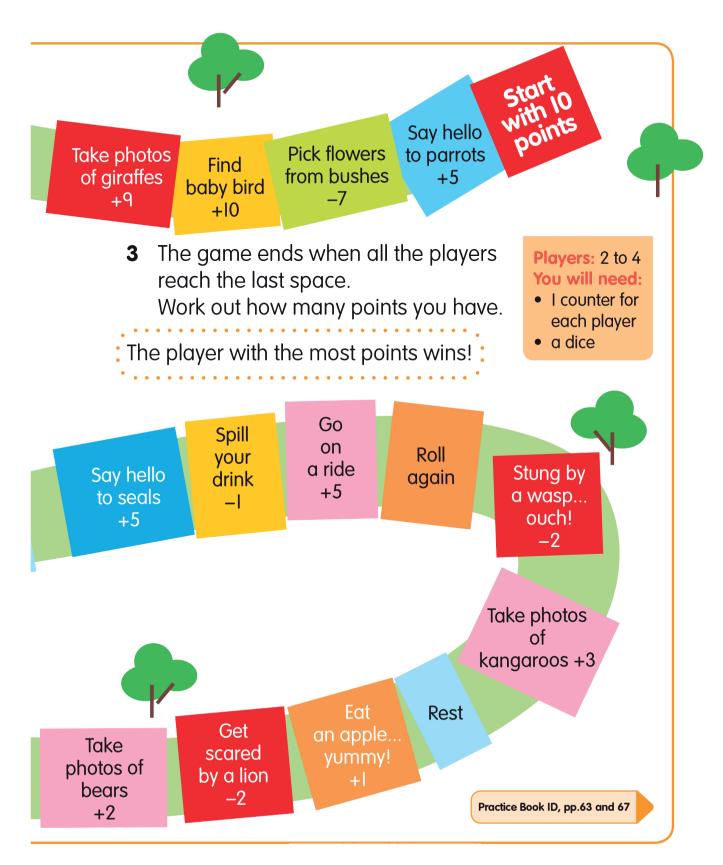
#### How to play

The objective of this game is to help children use and understand the language of greater than and smaller than. Ask your children to use both of these descriptions in their questioning.

# Wildlife points! Numbers to 100



# Wildlife points! Numbers to 100



# Wildlife points! Numbers to 100

#### What you will need

You will need one counter for each player and a dice. This can be played with two or more players and can be played in groups so that children can support each other.

#### How to play

Each player will start with 10 points. Each player should work out how many points they have after each turn. If necessary the children could have 10 cubes/counters/shells to start with and add and lose counters. Roll the dice and follow the instructions on the space where you land. You will be gaining and losing points. The game finishes when all the players reach the last space and say bye bye to the animals. Each player counts their points and the player with the most wins.

# Money under my cup. Money



- Money under my cup!

  How to play:
- Player I hides 3 coins under the cup. They must not add up to more than £1.



**3** Player 2 guesses which coins are hidden.



#### Players: 2 You will need:

- 5p, 10p, 20p and 50p coins (three of each)
- a paper cup
- 2 Player I says how much money is under the cup.



4 Player I checks the answer. Take turns to play. Have 5 turns each.



# Money under my cup. Money

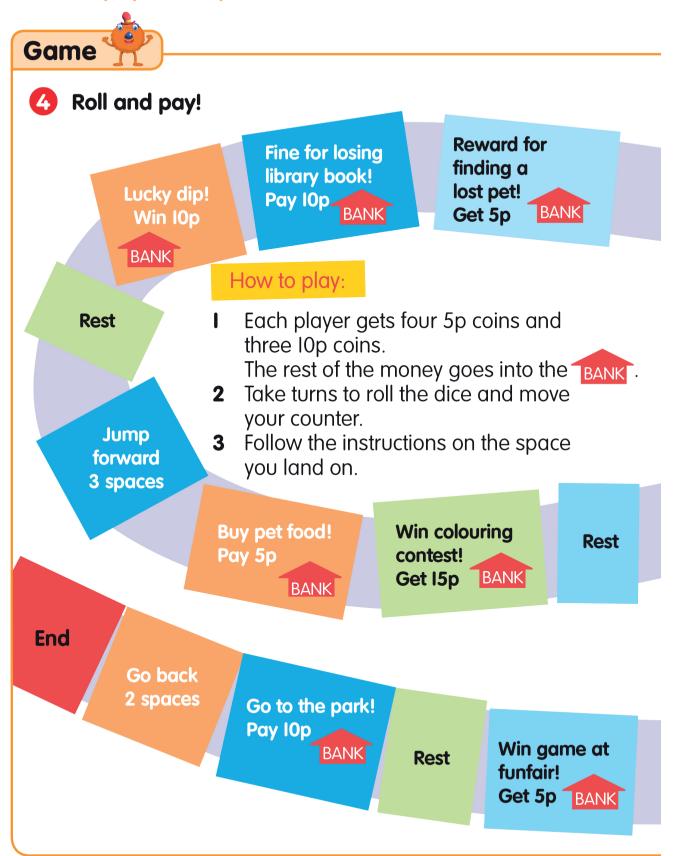
# What you will need

You will need three of each of the coins 5p, 10p, 20p and 50p and a paper or plastic non see through cup.

#### How to play

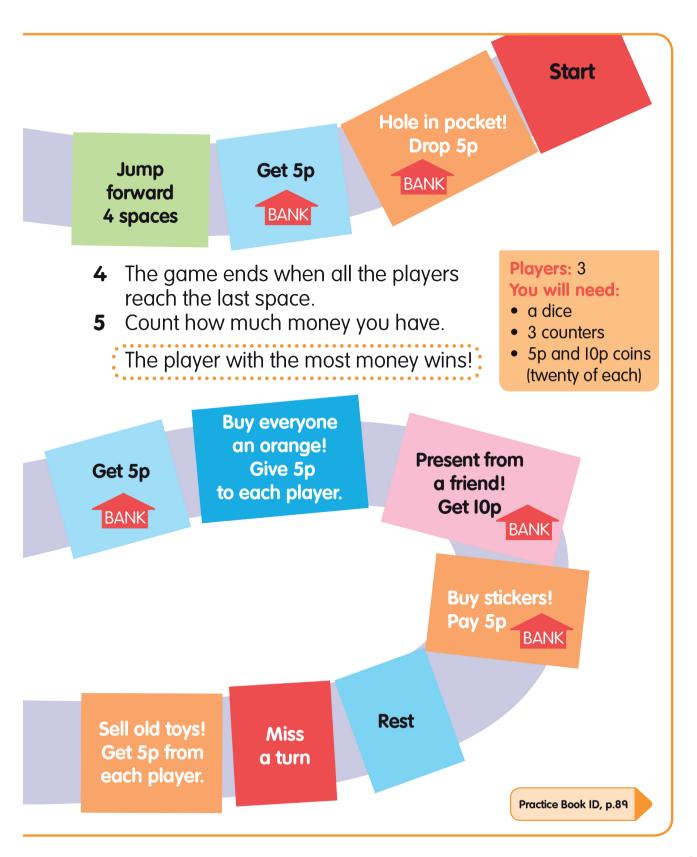
This game is for two players. Player one hides three coins under the cup and says the total of the coins under the cup. The other player has to work out which three coins are under the cup. You may want to start by putting a limit on the total that the coins make under the cup, so start with the total being no more than  $\mathfrak{L}$ I. You can then extend the amount that is hidden.

# **Roll and pay! Money**



24

# **Roll and pay! Money**



# Roll and pay! Money

#### What you will need

You will need twenty 5p coins, twenty 10p coins and a dice.

One counter for each of the three players.

If more than three players, then you will need more coins and more counters.

#### How to play

This game is for three people but could be played by more. Each player gets four 5p coins and three IOp coins. The rest of the money goes into the 'bank'. You can nominate one player to be the banker or players can take or give back to the bank the monies they earn or owe. Players take turns to roll the dice, move their counter and follow the instructions on the space they land on. The game finishes when all the players reach the last space. The player with the most money wins.