



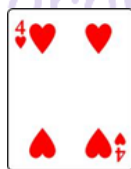
Maths Games

We have developed this booklet of games for children to enjoy at home with their families.

Through playing these games children can see that maths is something that has a practical purpose and that it can be fun.

While playing these games they will develop their fluency with number and this improved fluency will build their maths confidence

A place to grow





A place to grow

Contents

🌳 A Pack (or two) of Cards

🌳 Using Dice.

🌳 And Finally!



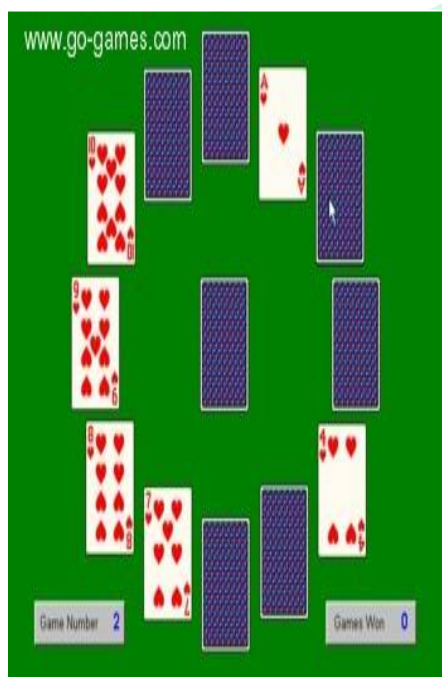
A Pack of Cards



- **Snap**- playing simple snap can help with counting and number recognition
- **Turn Over Tens** - Players take it in turns to turn cards over. The first player to say ten when that is the total made by adding the two cards together wins that pair of cards. The winner is the player with cards left. This game is more effective with the picture cards removed.
- **Turn Over Totals** - Players take it in turns to turn cards over. The first player to say the total made by adding the two cards together wins that pair of cards. The winner is the player with the most pairs.

Clock Patience

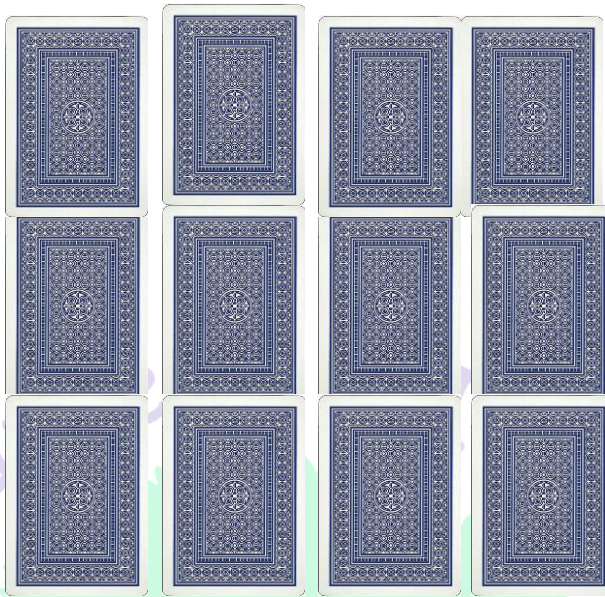
Deal 13 piles of four cards - 12 in a circular pattern as if on to the hours of a clock, and one into the clock's centre.



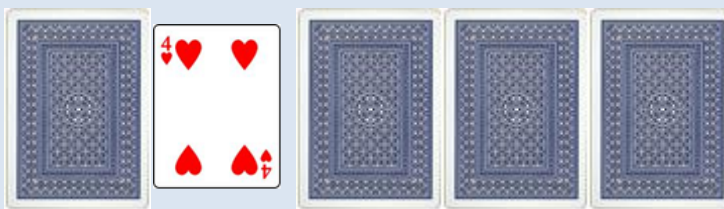
Turn over the top card of the central pile. Tuck it, face-up, beneath whichever hour pile matches its rank (i.e. five o'clock for a five, one o'clock for an ace, jacks go to 11 o'clock, queens to 12 and kings to the centre) then turn over that pile's top card, repeat the process with the new card. Play continues in this way until it can no longer continue.

You win if all the cards are turned face-up, but if four kings appear first you lose as there will be no card to flip - so have another go.

Elevens Patience (our version)



- Deal 12 cards face down on the table. Then deal out the rest of the cards face down on top of these until all the cards are dealt.
- Turn the top card on each pile face up
- Remove pairs of cards which total 11.
- As you remove the card turn the next card up, if there is a space move a card from any pile into the space.
- The game ends when you have no cards left.



Turn Over Multiples -

- Deal a pack of cards, face down, into five piles
- Players take it in turns to turn cards over.
- Put the card in the discard pile
- The first player to identify a multiple of 2 (or 5 or 10) picks up the discard pile.
- Play continues until one player has all the cards

Winner takes all!

This is a short game

You need two packs of playing cards or two sets of cards with numbers on them
(there is a set at the back of this booklet)

- Two players will each turn a card over.
- The players will compare cards to see who has the biggest card, that person wins that round.
- Then work out the difference between the two numbers- found by counting on smallest to largest) and win that in pennies.
- The first to reach 20 pence wins (and maybe gets to keep the money!)



Using Dice

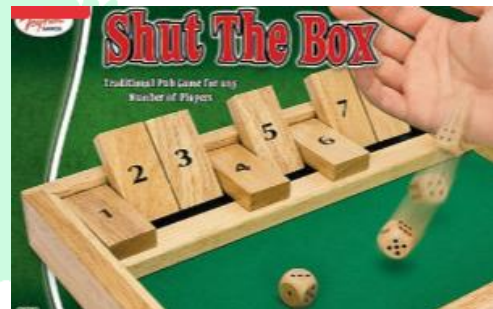
There are nets for making your own cuboid dice included in this booklet

Cross it Out

- Write the numbers 1-12 on a piece of paper.
- Throw two dice. Either cross out the total the dice make or the number on each die e.g. if you throw a 1 and a 4 you could cross out the total 5, or the 1 and the 4.
- Keep throwing the dice and crossing out until you throw a pair of dice for which you have already crossed out the total or the face value of the dice.
 - Can you cross them all out?
 - Can you cross out more than your friends.?

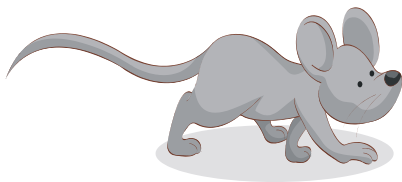


This game is based on the game shut the box .



Mouse

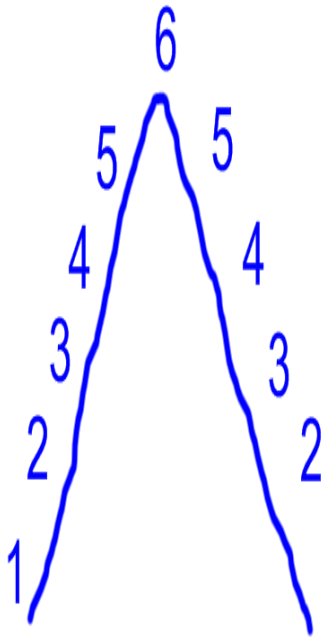
The aim of the game is to be the first to complete a Mouse. Each roll of the die enables a particular body part to be drawn as follows:



- 6 = body
- 5 = nose
- 4 = whiskers
- 3 = eyes
- 2 = ears
- 1 = tail



The body must be drawn before the other body parts are added to it, so players must therefore roll a 6 to start. Once the body has been drawn, the other parts of the mouse may be added in any order. If you roll a number which relates to a part you have already added, you miss your go and pass the die on.



Mountain

The object of the game is to be the first to climb your mountain, in number order, and then descend the other side.

A piece of paper, a pencil and 2 dice. Allow the youngest player to start.

Each player draws their own mountain

The youngest player rolls the dice and hopes for a 1, which will allow them to cross the number 1 off his mountain. If they roll a 1 and cross it off then they throw again, if they get a two they cross it off and then throw again. 1.

Their turn ends when they do not throw the next ordered number.

Play continues until someone has made it all the way up their mountain and down the other side in the correct order.

An alternative way of playing the game is to have one mountain you are climbing together.

Beat that

You need two dice

How to play

Roll the dice and put them in order to make the highest number possible.

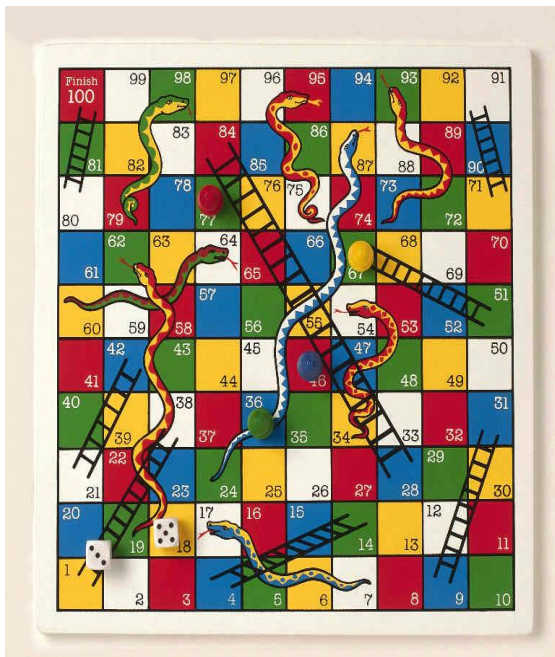
If you roll a 4 and a 6, for example, your best answer would be 64. Write down your answer, pass the dice, and challenge the next player to "Beat That!"

Play in rounds and assign a winner to each round.

For a change,

- try making the smallest number possible!
- or try using three dice

This is a great game for reinforcing the concept of place value. If you are playing with younger children, explain your reasoning out loud and encourage them to do the same.



Changing Your Board Games

Use two dice instead of one to help your children practice making totals.
Ask the children to predict which number they will land on before counting the spaces.

For a change

You could try a multisided dice



Pass it on.

You need

A large bucket of water,

A small bucket

A scoop (shovel or cup)

A dice.

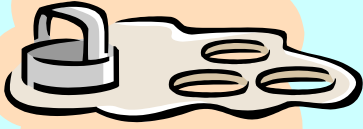


Throw the dice and add that number of scoops of water to the small bucket.

Pass the scoop and the dice on

The children will have to keep count as once the scoop has been added to the small bucket it is no longer discreet and can't be checked.

And Finally!



Double and Half Biscuits

- ◆ 2 margarine
- ◆ 1 icing sugar
- ◆ 2 plain flour
- ◆ 1 custard powder

*Usually 2= 200g of margarine and of flour
and 1= 100g of icing sugar and of custard powder
but it is the ratio of the quantities that is important.*

Cream the margarine and the icing sugar together with an electric mixer

Then mix in the Flour and custard powder

When all is combined bring the dough together with your hands.

Roll out on a floured surface -about half a centimetre thick

Cut into any shape you want or roll into small balls and push flat.

This mixture can be rolled out time and time again.

Take Away Blocks

A place to grow

Start with 10 building blocks. Get the child to close his eyes and take three away. The child has to work out how many you have taken and how many are left.



For a change

This game could also be played with beads, or collections of cars etc

Once a week, tip out the small change from a purse. Count it up with your child.



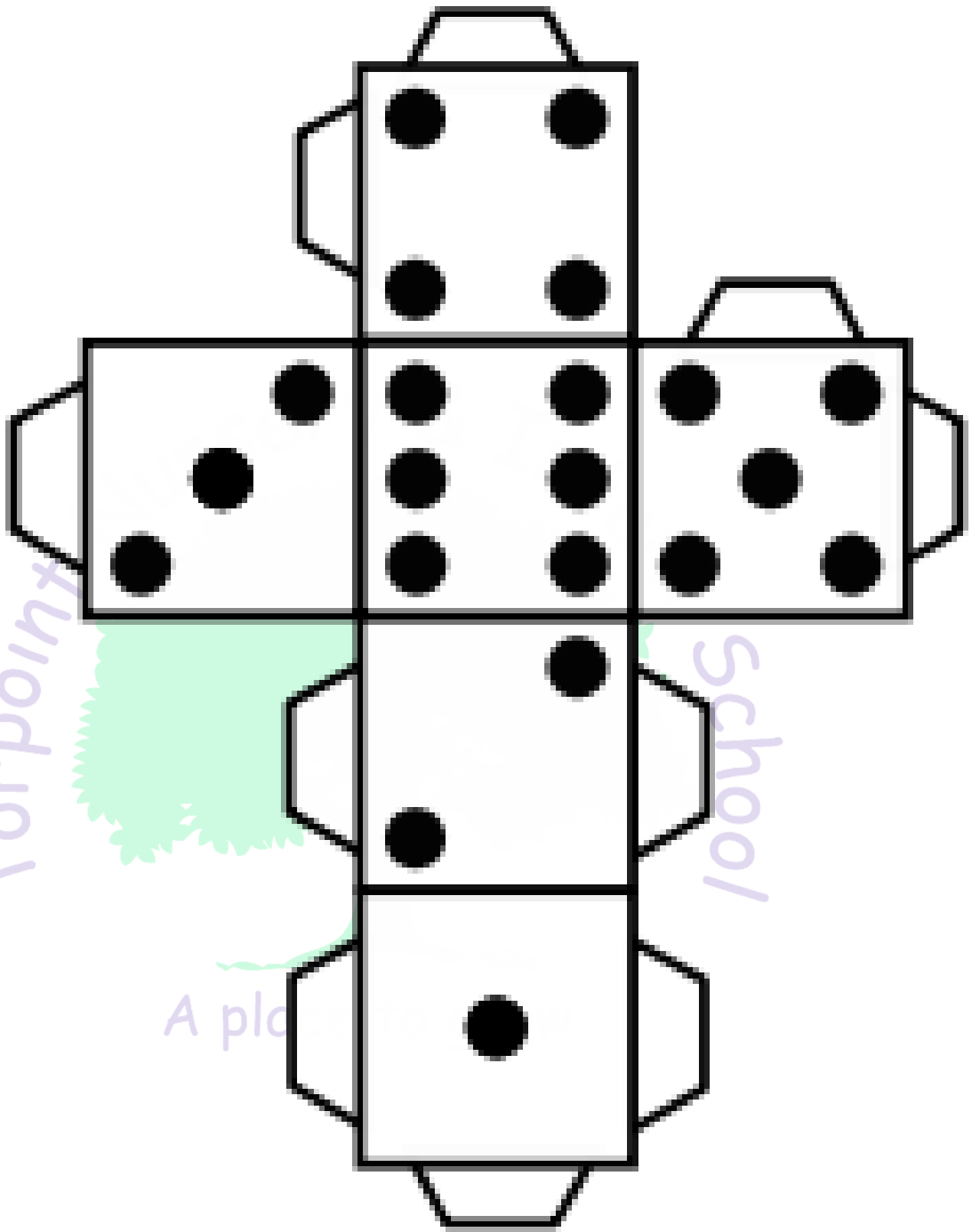
Any Picture Book



Using illustrations in a book can develop mathematical vocabulary and questioning. Look for opportunities to

- count things on a page e.g. 'how many windows are there?',
- use positional vocabulary e.g. 'what is behind...?' or 'who is in between...?'.
- Use comparative vocabulary when questioning e.g. 'can you see something smaller than...?' or 'is there anything taller than...?'

A place to grow



Torpoint

School

A place