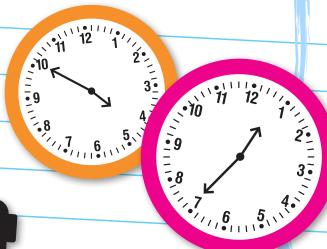




12:45

# Telling the time Pack





7:00

The School Run.com

# The parent's guide to teaching time

Whether we're rushing to beat the clock or working out ways to organise our lives so there's more chance to relax, everything we do is underpinned by time. In fact, one of the first lessons your child learns – how to distinguish between day and night – is about becoming aware of time.

From that point on, as they grow and mature, children gain an increasingly profound understanding of time and the way it affects everyday life.

So as a parent, what can or should you be doing to help your child learn about time? What skills does your child need to master, and how can you help them?

This pack will explain more about the concepts your child needs to be able to understand. We'll also provide you with advice and practical, effective ways you can help your child to learn about time (and have fun doing it!).

# Why is telling the time hard for so many children?

'Time is a very challenging thing to understand,' says
Sue Pope, formerly national lead for mathematics at the
Qualifications and Curriculum Development Agency and now
Professor of Education at Liverpool Hope University. 'There are
60 minutes in an hour, 24 hours in a day, 7 days in a week and
all the months are different lengths – that's a lot for children to
get their head around!

'Also, time is not decimalised like other measurements. It was



the Babylonians who used base 60, and that's why we have 60 minutes in an hour. Sixty has lots of factors, which means it divides exactly by lots of whole numbers.'

Sue also points out that, as adults, we often use fractions – half past, quarter to – to express time. 'There are also idiosyncrasies in the ways time is recorded – for example, 0700 or 07:00 or 7am or 7 o'clock. And we don't say morning and evening, we say am and pm!' she adds.

There's also the fact that we represent time in both analogue form (on a clock face) and digital form.

'Having access to both analogue clocks and digital clock is important, so that children are able to recognise the different representations of the same thing,' explains Sue. 'If you're using an analogue clock to tell the time, you don't read the numbers, you look at the shape. That's another reason why telling the time is so complex, because you're not just reading a set of digits, you are translating a "shape" on the clock face into something that makes sense with time!'

#### What if my child is 'behind'?

If you are worried about your child's progress, the good news is that education experts agree that learning to tell the time is not only a developmental process that takes place gradually and in stages, but also that what you can expect at any age is something which varies hugely from child to child.

'Learning to tell the time mustn't be competitive,' says John Coe, chair of the National Association of Primary Education. 'It's a completely natural thing that comes with time and experience. Just as some five-year-olds can show a level of maturity more like that of a seven-year-old, there's a big



spectrum of ability when it comes to children being able to tell the time. The key is to relax and never worry that your child won't learn to do it.'

'Children learn at different rates and learning happens in leaps and bounds,' adds Sue. 'Take learning to get dressed, for example. You may spend ages teaching your child to do up zips and buttons, and then one day they don't ask for any help. Also, remember that often although a child can do something they still like the reinforcement.

'It's so important not to think: "My child is no good at it",' she continues. 'Just keep on being positive and encouraging and don't give up. And remember that the so-called "norm" is an average – and this is based on making an aggregate of everything. So you would expect some children to be below or above an average and that's OK.'

# Is your child ready to learn to read time?

While a centimetre or a kilometre measures distance, time measures the events of our lives in a linear and ordered way. With this in mind, before you start teaching your child how to read a clock face they need to have grasped other concepts and skills.

#### A concept of past, present and future

Your child needs to realise that time changes over the course of the day and needs to comprehend the difference between the past (yesterday), present (today) and future (tomorrow). Helping your child become familiar with what happens when in terms of their daily routine (for example, that breakfast and getting dressed happen in the morning, lunchtime happens in the middle of the day and bedtime happens in the evening) is a great place to start as it makes the concept of time 'real' to

your child and enables them to place events in their lives into a logical and chronological order.

#### Confidence with counting

Your child needs to be familiar with the idea that there are a certain number of days in the week and hours in a day. This involves knowing how to count confidently – say, up to 100 – from memory.

#### Understanding numerals

'Your child needs to be able to recognise numbers and be comfortable enough to recognise that numbers in different places mean different things,' explains Sue Pope. 'For example, the numbers on a bus, on dice and on a clock all mean different things.'

Once these concepts are understood, Sue says, 'You can try and encourage your child to take an interest in telling the time, or start to teach it to them if they show an interest.'

#### How can I get started?

'There's no magic bullet,' says Sue. 'We're all different and we learn at different rates. I would advocate exploiting any opportunity. So if your child asks you the time, give them a time that's exact. At school your child's teacher will most likely teach your child in a systematic way, but it's at home – in real life – that all the times actually "happen" and it will help your child to hear all of them.

'The crucial thing is to take the opportunity when it arises – matching up events with the time on the clock, for example, by drawing attention to the fact you always sit and watch a TV programme at 2pm. This kind of constant reinforcement, as well as explaining when your child asks questions, will really



help. Everything you do at home is a learning experience. And the more positive you can make it, the better!'

#### **Keys to success**

Link abstract ideas to direct experience

As with so many of the things your child is learning, the first key to success lies in making the concept of time relevant to your child's everyday world. 'The whole art of primary school teaching is to relate direct experience to the abstractions of the adult world,' says John Coe. 'And this is particularly applicable to teaching the time.' In other words, you need to link the symbols on a clock face to what is actually going on. 'For example, if bedtime is at 8pm, you might want to alert your child that the hour or so beforehand is when you all need to start "keeping an eye on the time",' suggests John.

#### Use lots of different learning approaches

Put simply, this is about finding as many different ways and contexts to convey the idea of time as you can.

#### • Repetition, repetition, repetition!

Give your child plenty of opportunity to practise each and every concept as they come across it. This is essential to help consolidate their learning and build confidence. 'Remember that we never stop learning,' says Sue. 'You need to keep giving support and encouragement. There are lots of opportunities to do this, whether it's setting up the programmer on the TV, looking at the clock in the corner of the computer screen, talking about how long a journey will take and when you'll need to set off or having a calendar at home that you refer to. You can make all these things part of natural conversation. Gradually you'll find your child will start to take the initiative.'



# 21 easy ways to help your child with time

Learning to tell the time is a process which spans the primary-school years. We've compiled a list of 21 easy ways to help you incorporate lots of practice into everyday life – and included a few great telling-the-time games to play, too. Time to start clock-watching...

- Buy your child a timepiece an alarm clock or a watch, whatever they prefer that they can familiarise themselves with and that you can encourage independent learning with. Practise using it together at certain times of day, for example first thing in the morning or at bedtime.
- Play with toy clocks with moveable hands or help your child draw hands and numbers onto clock faces (you can print out blank clock faces in different sizes as part of your Telling the Time Pack).
- Look at the different ways of telling the time around the house and in the world at large the kitchen clock, your alarm clock, clocks on TV and the clock on your local church, for example.
- 4 Use time when you're cooking together. Let your child help set the kitchen clock or egg timer when you are boiling an egg, cooking pasta or baking fairy cakes.
- 5 Draw pictures of your child's daily routine and write down the time when each activity happens, or ask your child what time their dolly or teddy likes to do things.
- 6 Help your child make a personal TV schedule which lists

their favourite programmes and the day of the week and the time of day they're on.

- Use sports at school or on TV to help your child make sense of time and measure different lengths of time. How long does a game take? How long is 'extra time' or 'injury time'? When is half-time?
- Set into the habit of asking time-related questions such as 'How long until we have to leave for school?'.
- Play Time Dominoes you'll find game instructions and print-out tiles in your Telling the Time Pack downloads.
- 10 Help your child to feel confident about counting in fives so they can master counting in fives round the clock.
- Make a 'Days of the Week' or 'Months of the Year' paper chain to help your child get used to ordering the days and months correctly. You could also make a paper chain that counts down the days to Christmas, a birthday or another special occasion.
- Talk to your child regularly about the time of day for example, whether it's morning, afternoon, evening or night time. Match up activities your child does each day with the time of day when they happen.
- 13 Buy (or make) a children's calendar or weather chart that includes the seasons as well as the day of the week and month of the year. Each time you record what the weather is doing your child will learn more about the year's cycle and changing seasons.
- 14 Play guessing games to estimate how long an activity will take. For example, how long will it take your child to brush their teeth or tidy their room at the end of the day?



- 15 You could add a challenge and ask your child to beat the clock or an egg timer. Can they get their shoes on in less than a minute? Finish eating the last two spoonfuls of peas in thirty seconds? Walk to the park in ten minutes? Experiment with a sand-timer too, if you have one.
- Talk about time and your family and extended family, and ask your child to work out who is the oldest person in the family, or the youngest. Which of your child's friends are older or younger than they are?
- 17 Help your child practise writing the date (day, month, year) every day or every time they write a note or letter or start a piece of school work.
- 18 Show your child how to map out a timeline of their family history from a key event in the past (for example, when Great-Grandpa was born) through to the present year..
- Look at a train timetable with your child and plan a day out. Work out how long the train journey will take, then ask them to consider the extra time needed to travel to the station and buy a ticket. Ask them to tell you what time you'll need to leave the house to catch the train and finally test out their timings on a real outing.
- **20** Look at a map of the world and discuss different time zones. Can your child tell you what time it is in Australia or in different parts of the USA?
- Help your child write out a daily or weekly school schedule or a calendar of their school year that includes the dates of half terms and holidays. Ask them to work out how long it is until the next school holidays, Christmas or their birthday.

# Time in primary school: what your child will learn when

Reception	<ul><li>Use everyday language related to time</li><li>Order and sequence familiar events</li><li>Measure short periods of time</li></ul>
Year 1	<ul> <li>Use vocabulary related to time</li> <li>Order days of the week and months</li> <li>Read the time to the hour and half hour</li> </ul>
Year 2	<ul> <li>Compare and sequence intervals of time</li> <li>Tell and write the time to five minutes, including quarter to / quarter past</li> <li>Know the number of minutes in an hour and the number of hours in a day</li> </ul>
Year 3	<ul> <li>Tell and write the time from an analogue clock, including using Roman numerals from one to 12, and 12-hour and 24-hour clocks</li> <li>Estimate and read time, with increasing accuracy, to the nearest minute</li> <li>Record and compare time in terms of seconds, minutes, hours</li> <li>Use vocabulary such as o'clock, am / pm, morning, afternoon, noon and midnight</li> <li>Know the number of seconds in a minute and the number of days in each month, year and leap year</li> <li>Compare the duration of events</li> </ul>
Year 4	<ul> <li>Read, write and convert time between analogue and digital 12- and 24-hour clocks</li> <li>Solve problems involving converting from hours to minutes, minutes to seconds, years to months, weeks to days</li> </ul>
Year 5 & Year 6	Solve problems involving converting between units of time

## Getting to know a clock face

Ready to get started? Here is a step-by-step approach to helping your child to learn to read a clock face.

#### Step 1: Hands of the clock

Familiarise your child with a clock face and the hands on the clock, so that they learn that the short hand is the hour hand and the long hand is the one for minutes.

#### Step 2: Units of the clock

You can then move on to teaching your child the units of the clock, starting with the hours ('o'clocks'), then the half hours ('half past') before moving on to quarter hours ('quarter to' and 'quarter past'). Make sure your child has fully understood each unit of the clock and had plenty of time and opportunity to practise it before you move on to the next concept. And remember, you are not trying to do everything at once!

#### **Step 3: Five-minute intervals**

Before moving on to learning about five-minute intervals, your child will need to be able to count in fives and tens. (This is usually something that they will achieve during Key Stage 1, aged 5-7.)

#### **Step 4: Time in a wider context**

Estimating or predicting how long something will take (teeth brushing, for example, or the walk to school) involves thinking about time in a wider sense. This is something your child can practise doing at the same time as learning to read an analogue clock. As this skill develops, your child begins to 'see' time in their minds – in other words, in its more abstract form.



# Telling the time Q&A with expert Cheryl Hossle



As a Special Educational Needs Co-Ordinator with 19 years of classroom experience, Cheryl Hossle has taught hundreds of children to tell the time. Now the educational consultant for a brand-new teaching method, she explains why learning to tell the time can be so tricky and offers practical strategies to try.

#### Why can children find telling the time a hard skill?

Teaching methods in other areas of education, such as phonics, have moved on hugely in the past few years. But the way time is taught hasn't. It's still mainly done by rote-learning, which focuses on memorisation. And if you were to write down how much there is to memorise with learning the time, it's a huge amount!

One issue for many children is that they can't remember which number is meant to mean what on an analogue clock. This is particularly the case for children with special educational needs, such as dyslexia or memory deficits. Also, a child's brain is immature. Children are still 'flipping' things round – writing their numbers and letters backwards, for example. In addition, when decoding a clock face you are asking a child to use their 'picture' or 'visual' memory, which isn't fully developed.



Why does mastering how to tell the time happen at such different stages for different children?

There are lots of concepts that children need to master to learn how to tell the time, and developmental stages they need to have reached. For some children visual memory is the last thing to develop in their brain. If a child is a late visual memory developer, then they won't be able to access time at, say, Y1 stage and it works against them. There's also the brain maturity issue – a 6 looks like a 9, and 5 and 3 get muddled up. Many children are being asked to understand the numbers on a clock face when they simply haven't 'got there' yet.

Are there any key Dos and Don'ts to be aware of when it comes to helping my child to learn to tell the time?

Do help your child to learn the time in short bursts – just fiveminute intervals. Don't sit down for a lengthy period and expect them to understand it all at once.

Do establish the key milestones: the 'o'clock' and 'half past', then the 'to' and the 'past'. Finally, put the jigsaw together. Work on it in short bursts so these concepts have time to settle in your child's brain.

Don't overload your child. Let them dictate how much they want to learn at each stage.

My child has special educational needs. What particular obstacles might they encounter when learning to tell the time?

Time is an area that any child with even a slight Specific

Learning Difficulty (SpLD) such as dyslexia, dyspraxia, ADHD or Asperger's Syndrome, will have problems with because these children can find it harder to hold numbers in their mind or 'working memory'. They need to link these numbers to a logical idea even more than a child who doesn't have a SpLD.

Visual memory anchors are key in helping them to do this. On an analogue clock, the long hand pointing to 1 actually means 5 (five minutes past the hour), and this is a concept that children with SpLDs find it hard to process. With the new Aramazu method I have worked on we use pictures of a foot and a finger rather than the two very similar-looking hands of the clock, as well as the concept of climbing 'hour mountains'. These are very strong visual pictures.

#### Why is it beneficial to teach children about time in a new way?

Instead of using parrot-fashion rote learning, Aramazu uses a logic that children can relate to and find easy to understand. The visual aspect means they don't have to rely on numbers or their meaning. Instead they're told a story about time, and then use the memorable events, sounds and pictures to help them understand it. They can work it out and mime it easily.

We started by representing the twelve numbers on a clock face in a straight line, a concept which kids are familiar with because they use number lines in Key Stage 1. We use a 'finger' hand to point at the hours, and a 'foot' hand shows the minutes. Once they've been introduced to the Aramazu story and method, the children learn to ask three simple questions when they look at a clock: Is the foot 'past' the top of the hour 'mountain' or going up 'to' it? How many 'steps' past or to?

And which hour mountain is the finger pointing to? These three questions can be summed up as: 'Foot – Foot – Finger'. We find that five minutes' practice every couple of days helps children feels very secure with the concept in about a week.

Would using a different method of teaching at home confuse my child in school? I don't want to make it harder for them!

If you use the Aramazu method, it won't conflict with what your child is learning at school because transferring their knowledge to an analogue clock is very straightforward. The Foot-Foot-Finger questions make sense on a 'normal' clock with a long hand and a short hand too! The children I've worked with have loved the stories and antics of Aramazu. There is research to show that boys learn maths best when it's part of a story, and girls when it's presented as part of a scenario they know and understand, and I find Aramazu lends itself to both.

For more information about the Aramazu method go to www.aramazu.com or watch Cheryl's YouTube video.

#### The days of the week

Help your child cut out the name of each day and then put them in order. Practise saying the days in the right order together and ask your child questions such as:

- What day is it today?
- What day was it yesterday?
- Which days do you go to school?
- What day comes after Monday?
- If today is Wednesday, what day was it yesterday?

**Monday** 

**Tuesday** 

Wednesday

**Thursday** 

**Friday** 

Saturday

Sunday



#### The months of the year

Help your child cut out the name of each month and then put them in order. Practise reciting the months in the right order together and ask your child questions such as:

- What month were you born in?
- In what month do we celebrate Christmas?
- When are the summer holidays?
- What is the first month of the year?
- Can you name an autumn month?
- What month comes after April?

**January** 

**February** 

March

**April** 

May

June



#### The months of the year

July

**August** 

September

**October** 

**November** 

**December** 

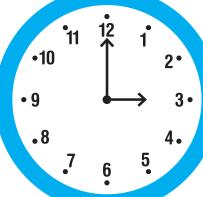
You could also teach your child to recite this traditional English mnemonic rhyme to help them remember the lengths of each month of the year:

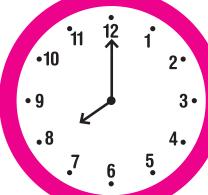
Thirty days hath September,
April, June, and November;
All the rest have thirty-one,
Save February, with twenty-eight days clear,
And twenty-nine each leap year.

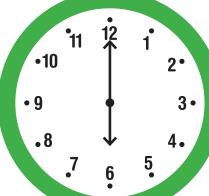


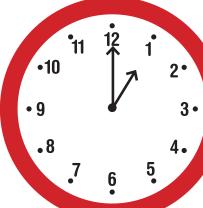
#### **Read the time**

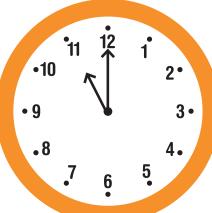
What time do these clocks show?

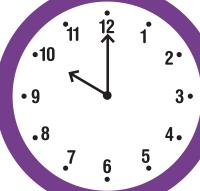












## What happens when?

Match each of these activities with the time of day when you do them.





Go to school



Eat lunch



SE STATE OF THE SECOND SECOND

Play after school



Go to bed

1pm

5pm

7am

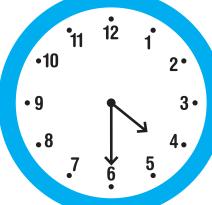
3pm

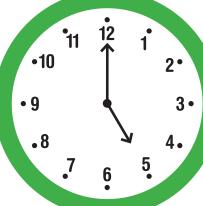
8pm

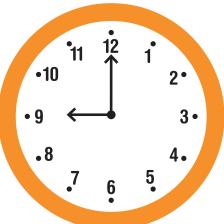
9am

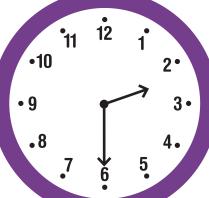
#### **Read the time**

What time do these clocks show?

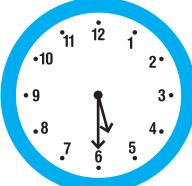


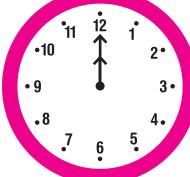




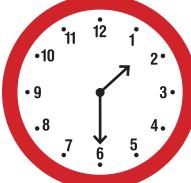


Read the time on these clock faces then write the time in words.







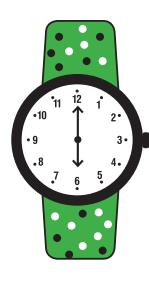


# **Read the time**

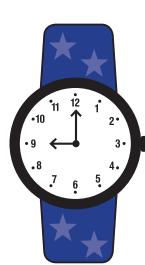
Match the time on these watches and the time written in words.













Half past ten

Eight o'clock

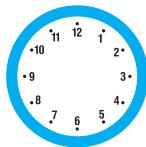
Half past three

Nine o'clock

Midday

Six o'clock

Write in the correct clock hands to show these times.



Three o'clock

Half past six





Seven o'clock

Half past one



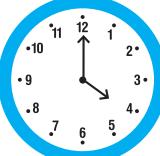


Midnight

Half past eleven

#### **Read the time**

Match these analogue and digital clocks.



4:00

9:30

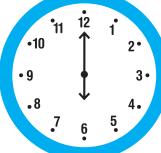
1:00

2:30

10:30

7:00

Read the time on the clock face then write the same time on the digital clock under it.









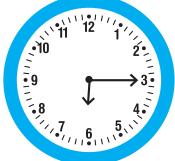




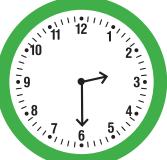


Read the time on the digital clock then write in the correct clock hands to show this time on the analogue clock.

Read the time on the clock face then write the time in words.





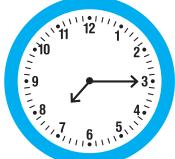








Read the time on the clock face. Can you write down what time it will be one hour later?













Match the time on these watches and the time written in words.













Quarter past eight

Quarter to eleven

Half past six

Quarter past five

Quarter to nine

Quarter to twelve

Read the time on the clock face then write the same time on the digital clock under it.





















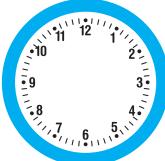




Read the time on the digital clock then write in the correct clock hands to show this time on the analogue clock.





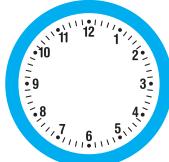


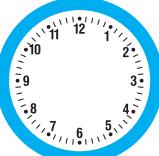
11:15

5:45









3:15

6:45

12:45

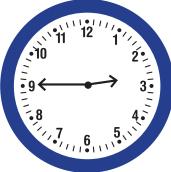
Read the time on these clock faces then write the time in words.













Read the time on these digital clocks then write the time in words.

2:32 5:41 8:50

1:23 10:16 12:01

Match the time on these 24-hour digital clocks with the time shown on the watches. Is it am or pm?

23:11

08:15

14:56

02:56

12:15

17:45













#### What's on the Box?



How long is Merlin on for?

What programme lasts for just five minutes?

Your mum says you can watch half an hour of TV today. Which programmes could you watch in that time?

You sit down to watch Diddy Dick and Dom and watch the TV until the end of The Scooby Doo show. What time do you turn the TV off, and how many minutes do you watch for?

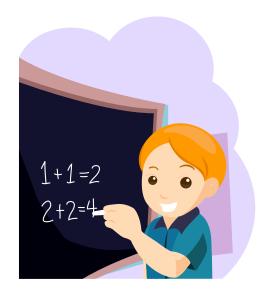
Which is the longest programme on this channel during the afternoon, and which is the shortest?

If watched TV from quarter to five to quarter past five, which programmes would you see?



## How did you spend your day?

Read these scenarios and solve these problems using your time-reading skills.





Your mum woke you up at 7:15, then called you again at twenty five to eight. How long did you snooze for?

You left home at 7:58 and got to school at 8:23. How long did the journey take you?

The lunch bell rang at 12:15 and it took you twenty minutes to eat your lunch. Classes started again at quarter past one, so how long was your playtime?

Football practice started at half past four. You scored a goal at 4:49 – how many minutes into the game was that?

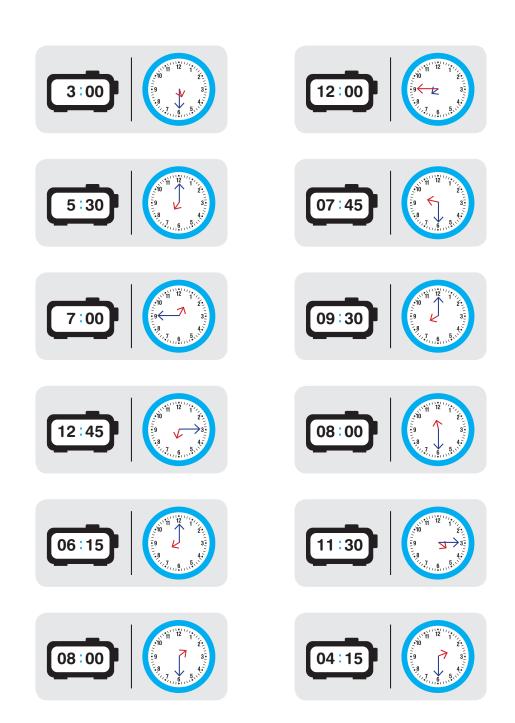
You got home at quarter to six and played a computer game from six o'clock to quarter to seven. How many minutes did you play for?

Time for bed! You got into bed at 8:12 but didn't fall asleep for forty-five minutes. What time did the digital clock by your bed read when you fell asleep?

# **Play Time Dominoes**

Help your child cut out the time domino tiles then settle down to play together.

**How to play:** Shuffle the 28 tiles. Each player draws seven tiles; the remaining ones are placed in a pool. The youngest player plays the first of their tiles by placing it in the middle of the table. The next player then places a tile with matching time shown; if the player cannot do this they miss their turn. After every turn each player takes another domino from the pool. The game ends when one player wins by playing their last tile, or when the game is blocked because neither player can play.



# **Play Time Dominoes**























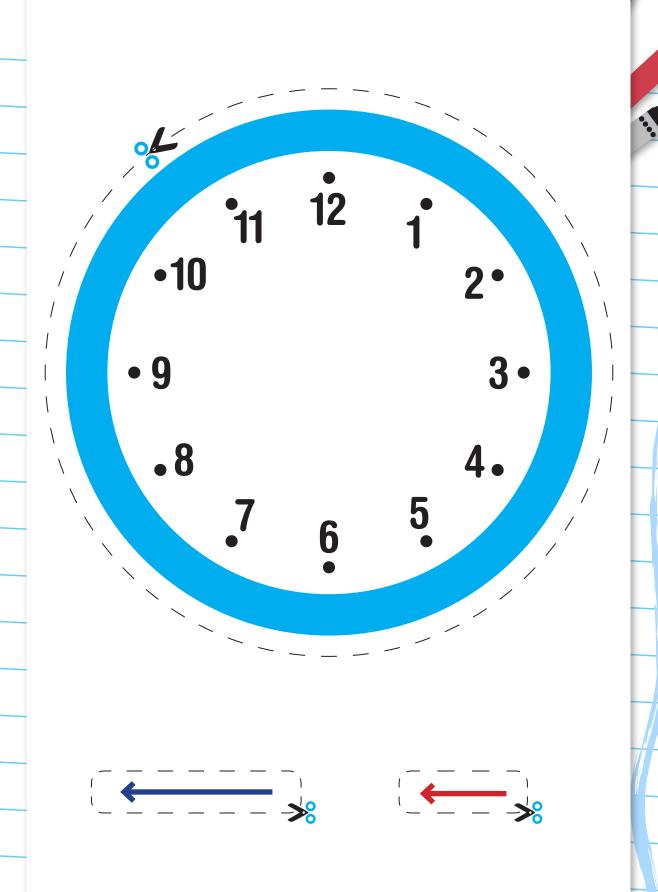


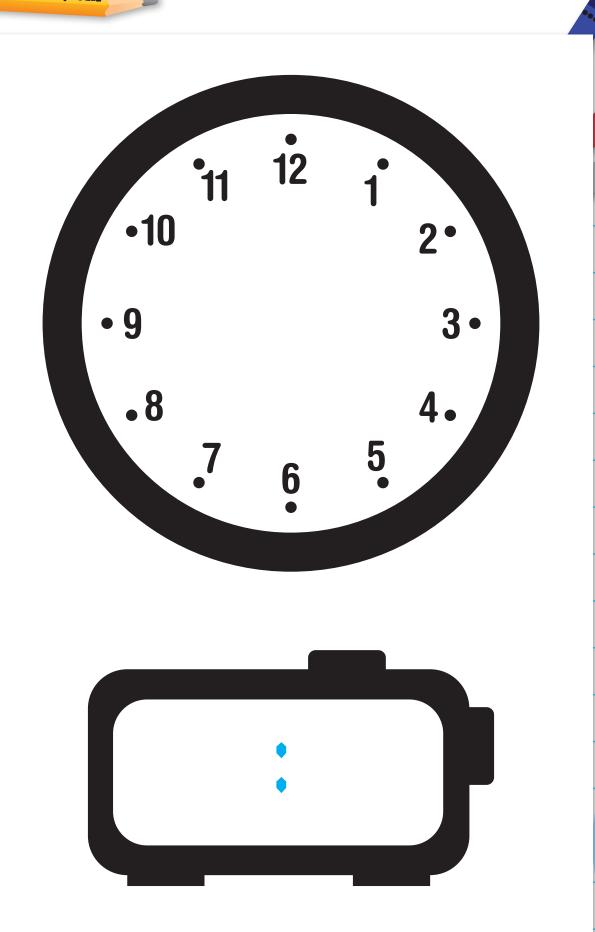


# **Play Time Bingo**

How to play: Print out copies of this number square and use it for time bingo. Call out Bingo if you get all the numbers in a row, column or diagonally. This game can be played by several players.

1:00	9 4. 10. 10. 10. 10. 10. 10. 10. 10	19:00	11 12 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1
10 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	13:45	Ten past ten	23:30
Midnight	3:00	9 3: -8, 7, 6, 1, 1, 5, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	Quarter past seven
20:40	11 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Five to nine	05:30
10 2: 10 2: 10 2: 10 2: 10 3: 10 3: 10 5: 10 7.7.7.6.1115.1115.115.115.115.115.115.115.115	Eleven thirty	6:45	10 12 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1





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