

LiFT: Learning in Families through Technology

Play and learn with apps you already have

Activities and guidance for shared digital play in families with 3–8-year-olds

campaign for learning | NATIONAL CENTRE FOR FAMILY LEARNING | DEPARTMENT OF EDUCATION | UNIVERSITY OF OXFORD | LiFT Learning in Families through Technology

Why play with apps together?

Whether you are using an app or reading a picture book, young children learn more from activities when they do it together with you!

High-quality educational apps can be hard to find and expensive. This pack gives ideas for ways to play together with children using free, everyday apps you might already have on your phone or tablet – like the calendar or maps. The ideas are linked to non-digital physical play opportunities and give you and your child a chance to develop basic digital literacy skills together. There is also guidance on developing a healthy, safe and intentional relationship with technology.

By using and adapting the ideas and tips in this pack, you can create quality play and learning time together. This can make screen time a positive, enriching and fun learning experience.

About this resource and screen time

This pack advocates for building healthy, informed adult-child digital literacy and co-play on mobile devices and aspires to bridge the gap between screen time debates and guidance versus how to make the most of devices productively with your child using what you already have; like turning a stick into a wand!

Physical, interpersonal connection, and talking and playing together are the best kinds of interactions for you and your child. Screens are add-ons, rather than replacements for simple and essential human interaction. In fact, most public health guidance recommends avoiding screen use for children under two, except for activities that encourage interaction, conversation and family connection. However, digital is part of our society, so it can be helpful to think about building healthy habits and supporting digital literacy skills.

You can find out more in the Frequently Asked Questions [page 19] and in the Additional guidance on using digital devices with children [page 20].

This resource will evolve as guidance, technology and research progress.

Why play with apps together?

How to use this resource

- Not sure which activity to try? Start on [page 5] or browse the apps which interest you (see Contents on [page 4]).
- Try out a few activities with your child – make sure you are around to help them if they get stuck and join in as much as you can – this will really support their learning.
- The activities do not specify particular ages but are designed to be suitable for a broad range of ages and stages. Most activities were designed with children aged 3–8 in mind. You know your child best. If your child is finding something too easy, or if they are older (6 years+), try the Next Level options.
- Many activities use more than one app – feel free to mix, match and adapt.
- See the   links for connections to books or other media.
- Once you have had a go with some activities, try making your own activities based on your child's interests using the 'Build Your Own Activity' tips on [page 18].
- Explain when you are taking photos or recording video or audio, and check your child is happy to be included – especially if you are sharing with others. Share your videos and photos sensibly. See the Frequently Asked Questions for more information on online safety, privacy and sharing [page 19].
- We use generic terms rather than branded apps.
- These activities can be used in any language.

These icons tell you which areas of learning each activity links to:

 Arts

 Communication and language

 Literacy

 Maths

 Personal, social and emotional

 Physical and health

 Understanding the world

Main contents


Why play with apps together?


Not sure which activity to try?


Camera


Notes


Timer


Audio recorder


Maps


Clock


Calendar


Gallery


Torch


Build your own activity


FAQs


Resources


Dictation


Lens

Not sure which activity to try?

Don't know where to start? You can find activity ideas to suit you here.

What are you up to?

Only got 5 minutes? Try

- I Spy Letters
- How long does it take?
- Exploring your neighbourhood

Got a house full? Try

- Video happiness diary
- Pass the timer
- Be a podcaster

Out and about? Try

- Around the world time detective
- Exploring your neighbourhood
- Plan a picnic

Want to spend time outside? Try

- Scavenger hunt
- All Maps Activities
- How long does it take?

Inside on a rainy day? Try

- Make a family plan
- Silly sounds
- Tell a story with photos
- Shadow puppet theatre

Doing chores? Try

- How long does it take?
- Plan a picnic
- Scavenger hunt



Not sure which activity to try?

By topic

Want to try some maths? Try

- Tell a story with photos
- Map and compare
- Our year

Need to move about? Try

- Shadow puppet theatre
- How long does it take?
- Scavenger hunt

Learning words and letters? Try

- I Spy Letters
- Secret light messages
- Pass the timer

Learning about the world? Try

- Around the world time detective
- Sound scavenger hunt
- Map and compare

Want to do something creative? Try

- Tell a story with photos
- Silly sounds
- Be a podcaster



Camera

Get snappy with your camera and video recorder!

Scavenger hunt

Take some objects or toys and hide them in different places around a room or outdoor space. Ask your child to find them and help them take a photo of each one. Look back over the photos and talk to your child about what was hiding where.

Next level: Get your child to take the photos. See how quickly they can find 5 things in a theme, such as red things, circle-shaped things, numbers, or vehicles. You can even incorporate this into your tidy-up routine. If you are out in nature, see if they can photograph plants, insects or birds and find out together what type they are – you could use books, an internet search, or image recognition to identify them.



Next level: Swap objects for sounds. Secretly record sounds in your environment – it could be noises made by objects, animals, or people. Have your child listen and call out/find the source of them. Change places: show your child how to use the recorder and have your child record sounds for you to guess.



Camera

Get snappy with your camera and video recorder!

Video happiness diary

Talk to your child about things that make them happy – they could be simple things, like a meal, playing with a friend, or a favourite toy. Use your device together to take a few videos throughout the day of things they notice that make them feel happy. You could do it too. When you are finished, watch the videos together and reflect on what made you feel happy.

Next level: Discuss the idea of gratitude – of being thankful and appreciating things that make them happy. You can also help your child to share their happiness diary with other family and friends. Why not make a happiness diary with family and friends together?

You could also use 'Notes' to practise writing, drawing and using emojis to express things that bring happiness.

You could also send the video to a relative and involve another family member in a dialogue using a Text Message app.

Instead of a video, why not record a voice memo, and send it to friends and family?

Book link: Thankful by Eileen Spinelli

Notes

Type, write and play with notes.

Plan a picnic

Plan a pretend teddy bears' picnic. Start by asking your child what food they might like to have – talk about what ingredients you might need if you want to make something like a cake or samosas. Have your child dictate the shopping list and let them watch you type or write it. Set up your pretend picnic with some play food or other objects.



Next level: If your child is able, let them type. If you need to go shopping, you could plan a real shopping trip and let your child help you find the items you need and check them off the list. You could even use the dictation function or use a free list app that lets you write or speak to make a list or even use voice notes to sing your list! If you are cooking a dish, try using your Camera to take photos of ingredients you buy and the stages of cooking and putting them together into a recipe. Make an album in your photos of your activity and press the Play button to watch your own cooking show!

I spy letters and sounds

Have your child name an object they see around you. Draw their attention to the starting sound (it might be more than one letter) and type it in your notes app. Talk about what different letters look like: Does S look like a snake? How do capital D and lowercase d look different? (Note that some letters look different when typing and handwriting too – like 'a' in most fonts is "double-storeyed", where in handwriting 'a' is "single-storeyed".)

Next level: If your child is already familiar with letter sounds, you could play the usual rules of *I spy* and have your child guess objects beginning with a certain sound. Keep a record of all the things you find beginning with a certain letter in notes – read them back together afterwards. You could even make a picture, poem or story with as many of them as you can. Or, if your notes app has a drawing option, have your child draw or trace the letter.

Song link: The Teddy Bears' Picnic.

Teddy Bears' Picnic activity

Timer

Use the stopwatch and timer to explore numbers and more.

How long does it take?



Show your child the stopwatch and talk about how it works. Give your child a challenge to do against the clock: for example, find 3 soft things, jump 10 times, put their socks on, or run to every room in your flat or house. You could even try something silly, like pulling funny faces. You could even time chores, like sorting socks and putting toys away. Time how long it takes. Talk about what the numbers mean, and compare (e.g., faster, slower).

Next level: You can compare things which happen over long- and short-time scales to bring in some science. How long do different objects take to roll down a ramp? How long does it take for an ice cube to melt under different conditions (near a heat source, inside an insulating bag)? See if your child can predict which will be quicker and record and compare with your observations. You could type your predictions in the notes app.

Pass the timer

Play this fun game for 2+ players with older children. Choose a category, for example farm animals, words beginning with a certain letter or ending with a certain sound or sounds (e.g., 'at'), feelings, or characters from a favourite film. Start the timer for 60 seconds (making sure the sound is on) and turn off the screen (no peeking!). Each player has to say something new from that category before they pass the device to the next player. Keep passing the device until either the timer goes off or someone makes a mistake (repeats or gives an incorrect answer). The player with the device or who makes a mistake gets a cross – make a note of these somewhere. The player with the fewest crosses at the end of 10 rounds wins.

Next level: Explore trickier categories which your child may be learning about: it could be reptiles, numbers from the 4 times table, or ancient Egyptian gods! Or make a category like 'animals' extra challenging by naming examples from each letter of the alphabet in order.

Book link: Alley Cat Rally by Ricky Trickartt or A Second is a Hiccup by Hazel Hutchins

Audio recorder

The audio recordings app is also called voice memos and voice recorder. You can use it to record any sound including your own voice!

Silly sounds

What's the silliest noise your child can make? Record it. Talk about what it sounds like.

Next level: If you can, try editing it using your sound recorder – making it fast or slow, loud or quiet, or trimming parts of the sound. You might find inspiration for silly sounds in

Book link: The Book with No Pictures by B.J. Novak

or squelching in the mud in *We're Going on a Bear Hunt*

Book link: We're Going on a Bear Hunt by Michael Rosen

Try making sounds using objects you find around the house or outdoors and bring your story recording to life.

Sound scavenger hunt

Swap objects for sounds. Secretly record sounds in your environment – it could be noises made by objects, animals, or people. Have your child listen and call out/find the source of them. Change places: show your child how to use the recorder and have your child record sounds for you to guess.

Be a podcaster

Think of a topic with your child that they like to talk about. Ask them questions about it and record it like a podcast interview. Swap places. Give your podcast a name and share it with family or friends.

Next level: As above in the Camera activity, discuss the idea of gratitude – of being thankful and appreciating things that make them happy. You could extend this by helping your child interview other family or friends about what makes them happy. Why not record a voice memo and send it to friends and family? You could also encourage family to record a story for your child to listen to.

Maps

Use your map app to explore close to home and beyond.

Exploring your neighbourhood

Look at your local neighbourhood on your map. Can you and your child point out their school and local park and map a journey together? What does the map say about walking versus cycling or taking public transport?

Why not try dropping pins after a day out to explore all the places you've been? Depending on your settings you could explore your 'timeline' together [scroll down to the bottom of your profile on the app] and talk about the story of your day. You could use your audio recorder to record your story, using sequence words like first, next, then, after.

You can even explore places your child is learning about at school; for example Egypt.

Map and compare

With older children, try mapping one of your journeys on your maps app. Input your destination together and let your child guide the way by following the map directions and encouraging using vocabulary like the cardinal directions [north, south, east, west] and turning right or left. You could use your camera to take photos on your journey and even compare maps looking at the map in your photo album [your photos app] will have an album showing a map of all the places you have taken pictures – they will be geotagged as long as the location setting is open to allow you to see where you were. [Go into Collections and maps and see where you took the most photos.]

Maps

Use your map app to explore close to home and beyond.

Make your own

When you get home, can you recall together your journey and sketch it out on a piece of paper, making notes of what you saw and what was different or similar to the digital map? Why not explore the 'terrain' version on your app and add details to your drawing? How does your drawing compare to the digital version?

Screenshot a picture of your journey on a map and add it to an album. Draw how far you have travelled using the drawing function in photos.

Book link: Rosie's Walk by Pat Hutchins



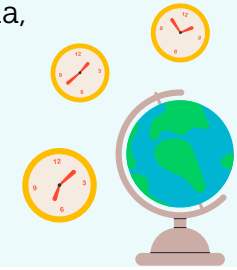
Clock

Look at different times around the world – and your own daily routines.

Around the world time detective

Look at the world clock feature together. Find a few cities around the world and compare the times. If it is morning where you are, where might children be getting ready for bed? Where might they just be waking up? Talk about why different places have different times. Your app might even show light and dark according to the time and where the sun is.

Next level: Choose a family member, friend or animal from another country and imagine what they might be doing right now. If it is 8pm in Australia, are children (or koalas!) eating breakfast, having lunch or sleeping? Look at a globe or map and see where those places are compared with where you live. Older children could investigate time differences and spot patterns between places east and west of where they live.



What's happening at this time?

Look at the current time on your clock and talk about what usually happens at that time of day. What do you normally do at 7am? What about 12 noon or 6pm? Use time words such as *before, after, next, earlier and later* as you talk. What do you do before lunch? What happens after bath time? What comes next in your day? Choose different times and imagine what people, animals or your favourite characters might be doing. You could act them out together.

Next level: Compare weekdays and weekends. Is 9am on a nursery or school day different from 9am on a Saturday? Older children could create a simple daily timetable and match activities to different times, using words like *first, next, before* and *after* to describe their day. You could compare this with events in your Calendar app and talk about what is happening today, tomorrow and later in the week.

Book link: It's About Time! by Stuart J Murphy

Calendar

Record and plan family events.

Before you start! You might want to hide any personal events from your calendar – you can usually do this by deselecting any calendars that are synchronised to your app.

Our year

Explore the calendar together and talk about how it is organised. How many days are in a week? How many months are in a year? Which month is the shortest? Which months have 31 days? Find today's date and count how many months have already passed this year. Talk about events that have happened in your family and things you are looking forward to. Add birthdays, celebrations or important family events to the calendar together.

Next level: Count how many days – or sleeps – until a special event. Whose family birthday is next? Older children could compare the lengths of different months and notice patterns in the calendar. You could plan this in more detail in the Notes app.



Make a family plan

Choose something fun to do together later in the week – maybe going to the park, baking, reading a new story or playing a game. Add it to the calendar and set a reminder. Talk about what you will need and if there is anything you should do to prepare. When the reminder appears, celebrate that your plan worked!

Next level: Plan a larger event together, such as a picnic or family celebration. Add different stages to the calendar and talk about what needs to happen first, next and last. You could plan this in more detail in the Notes app.

Book link: The Very Hungry Caterpillar by Eric Carle
The Very Hungry Caterpillar - read aloud or
The Very Hungry Caterpillar - animated book

Gallery

Turning your photos into a story – and more.

Tell a story with photos

Choose 5–10 photos from your gallery and look at them together. Try putting them in an order that tells a story. What happened first? What happened next? How did it end? Encourage your child to narrate the story while you swipe through the pictures.

Next level: Use the inbuilt editing tools to add speech bubbles, captions or funny effects. You might even be able to add sound effects. Older children could create a comic strip or photo diary from the images.



Photo detectives

Zoom into a photo and suggest things for your child to look for. How many red things can they find? Can they find something shaped like a circle? Which object is nearest or furthest away – are they different sizes from what you'd expect in real life? Talk about what your child notices and encourage them to ask questions about the picture.

Next level: Compare two similar photos and play "spot the difference". Older children could sort photos into albums by themes such as nature, food, transport or colours. Or make an album from one of the other activities from this booklet, perhaps the scavenger hunt.

Book link: Journey by Aaron Becker
[NB not read aloud as there are no words, but set to music]

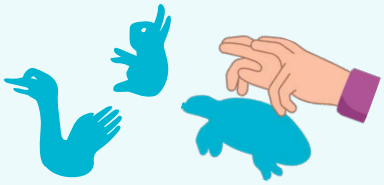
Torch

Use your torch to create plays and send messages.

Shadow puppet theatre

Turn on the torch and shine it onto a wall or sheet. Use your hands or toys to create shadows and make up a story together. Talk about how shadows are made when light is blocked. What happens when you move your hand closer to or further from the light?

Next level: Create a puppet show with different characters. Experiment with making shadows larger and smaller – predict what will happen before you move the light.



Secret light messages

Use the torch to send simple messages. Start by making patterns: one flash, two flashes, three flashes. Can your child copy them? Give each one a meaning (e.g. flash once for 'yes', two for 'no'). Talk about how people use lights to communicate over long distances.

Next level: Introduce simple Morse code. Try spelling initials or short words using dots and dashes. Older children could invent their own secret light code and challenge family members to crack it.

Goodnight teddies

Hide under a blanket together and use the torch to see, talking about dark and light and how your eyes slowly adjust to the change in light. Your child could put their soft toys to bed in the dark, like the zookeeper does in *Good Night, Gorilla*.

Book link: Good Night, Gorilla by Peggy Rathmann (links to the use of a torch and bedtime routines) Bing Videos or Good Night, Gorilla - An Animated Story

Build your own activity

Make your own activities, tailored to your child's own play and interests. Follow these steps:

1. Start by thinking about a game your child played recently – for example, making a den or pretending to cook – or an interest they generally have – such as a sport, diggers or cats.
2. Then think about how you could use one of the apps you already have on your phone or tablet, to develop or add to that kind of play. For example, could you use notes or video to record steps for how to build a den? Or use the clock to pretend you are in different places around the world.
3. Or, start the other way around – choose a specific app. Open the app and look at the features it has. Think about links between this and your child's play or interest.
4. Make a note of your idea to use the next time you have the opportunity with your child.
5. Try out the activity with your child, allowing them to take the lead and giving guidance when needed. Encourage your child to try out different ways of using the app in the game, and praise and encourage their ideas (as long as it means you are still playing together).
6. After trying it out, reflect on how the activity went. Think about what you learned about supporting your child through co-play, and what you could try next time.

Tips

- Look at other apps that you have on your device: you might try video call, grocery shopping, email, music player, image recognition, translation, calculator, downloads or spreadsheet apps. Some parents use their voice assistant to ask the internet questions and even identify a song. Some use music apps to create playlists with extended family.
- Consider other digital devices which you could integrate into your family play – smart speakers, games consoles etc.



Frequently Asked Questions

What evidence is there that these kinds of activities support learning?

These activities are suggestions based on research which shows that using digital media together with young children supports their learning better than solo use[1]. There is no direct evaluation to show that these specific activities are effective.

How often should I do these activities?

Think of these activities as just one type of play for your child to enjoy during the day, aiming for a mixture of physical activity, pretend play, creative play and books/reading time. We would suggest trying these activities no more than once per day.

Shouldn't I be trying to reduce screen time?

Public health guidelines tend to advise no screens for children under 2 years, apart from shared activities that encourage bonding, interaction and conversation. For pre-schoolers, the evidence suggests that *quality* matters as well as quantity. Instead of screen time, it can be helpful to think about children's digital 'diet'. A 'nutritious' and 'balanced' digital 'diet' would include play with an adult and making sure that the activity adds to (rather than replaces) the important things children need (such as interacting with others, physical activity and reading time). By contrast, a 'junk food' digital diet would mean lots of hours of solo use, and passive watching of screens without engaging, interacting or moving, and this could be potentially harmful for your child.

My child didn't like an activity – what should I do?

Always adapt to your child's interests and preferences. Try a different activity or try to integrate something they like or enjoy. It's important that the activities are fun and engaging to your child, otherwise they will not be attentive enough to learn. Or simply do another non-digital activity together – after all, young children learn from playing with you whatever activity you're doing!

Will my child want to use the phone or tablet more because of these activities?

These activities may make your child curious about your digital device. This is a great opportunity to think about and discuss what boundaries your family has around using devices – for example, some families limit digital play to certain times of day, situations or types of activities. Modelling good balance with your own device, and explaining the reasons you use it, can help too.

[1] www.weareteachers.com/kids-during-screen-time-research

Additional guidance on screen time, online safety and using digital devices with children



You can find out more about healthy digital use and guidance in the resources below:

50 things to do: Screen Time & Child Development: Resources for Early Years Practitioners
www.50thingstodo.org/national-campaigns/less-screen-time-more-play-time/support-conversations-parents

Talk with Me Leaflets for Parents
www.gov.wales/talk-with-me

Birth to 5 Matters: Digital Pedagogy
birthto5matters.org.uk/digital-pedagogy/

NSPCC: Starting family conversations about online safety
www.nspcc.org.uk/keeping-children-safe/online-safety/

NSPCC A parent's guide to online safety for children under five
www.nspcc.org.uk/keeping-children-safe/online-safety/parents-guide-online-safety-children-under-five/

Parentkind: Online Safety Toolkit
www.parentkind.org.uk/online-safety-toolkit

Parentkind: The parent's guide to managing screen time
www.parentkind.org.uk/about-us/news-and-blogs/blog/the-parents-guide-to-managing-screen-time

CBeebies: Keeping children safe online
www.bbc.co.uk/cbeebies/grownups/article-internet-use-and-safety

CBeebies: A parent's guide to screen time
www.bbc.co.uk/cbeebies/grownups/a-parents-guide-to-screen-time

CBeebies Screen time for kids
www.bbc.co.uk/tiny-happy-people/screen-time-advice

Best Start in Life: screen time guidance for under 5s
beststartinlife.gov.uk/screen-time-under-5s/

GOV.UK
www.gov.uk/government/news/new-screen-time-guidance-for-parents-of-under-5s



This resource was created by Miranda Baxter at Campaign for Learning, and Sophie Booton and Fiona Jelley at the Department of Education, University of Oxford. We thank all of our colleagues and the many parents and educators who helped shape this resource.

campaign for learning

NATIONAL CENTRE FOR FAMILY LEARNING

DEPARTMENT OF EDUCATION | UNIVERSITY OF OXFORD

LiFT
Learning in Families through Technology