

Little Time Explorer

Discover the inventions around your home.



This adventure belongs to: _____

Discover. Play. Remember.

Ages 6–9 · Printable PDF · With a grown-up
Sample — your version will feature your child.
The explorer shown here is fictional.

A little time together

Read, then try

Start with one discovery and its activity. Try about 10–15 minutes or stop sooner. Read aloud, talk, point and draw. This is not an exam.

Come back later

Close the discovery pages before revisiting clues on page 18. Encourage a guess, then look back together. Remembering every detail is not the goal.

Play the card game

A grown-up cuts out pages 15–16. Start with three object–clue pairs. Read the clues aloud, turn the cards face down and take turns revealing two. Keep a matching pair; turn other cards back. Add all six pairs when ready.

Print and prepare

A4 portrait, actual size (100%), single-sided. Use the same opaque paper or card for both card sheets. Bring pencils and a spare sheet to cover pictures. Keep the answer key separate. Adults handle scissors.

About this sample

Practice remembering names, ideas and sequences through illustrated activities. There is no promise of higher IQ or improved general memory. Imaginary visits connect real historical ideas. The fictional explorer is not a customer.

The wheel



Wheels help us move loads.

Imagine visiting a workshop long ago. A craftsperson shows you a cart with wooden wheels. Instead of dragging its load along the ground, the cart rolls on wheels that turn around an axle. People used wheeled vehicles thousands of years ago. We do not know the name of the wheel's inventor.

Remember this: A turning wheel, a moving load.

Talk together: Where can we find wheels at home?

Circle the things that use wheels.

Circle each name that belongs to something with wheels.



Bicycle

Spoon

Book

Toy cart

Pretend invention: draw something on wheels for your family.

Paper and books



Paper gives ideas a place to stay.

Imagine watching a paper-maker lift a thin layer of wet plant fibres on a screen. When the sheet dries, it can hold writing or pictures. Paper-making developed in China long ago. Before paper, people also wrote on materials such as clay and papyrus. A book can gather many pages of ideas.

Remember this: Wet fibres become a dry sheet.

Talk together: What family idea would you put in a book?

Look, cover, then draw three objects.

Study the foreground table on the previous page.
Cover it with a spare sheet. Draw or name three objects.



Object 1

Object 2

Object 3

Timekeeping



People measure time in different ways.

Imagine a table of timekeepers. In sunlight, a sundial's shadow changes position. An hourglass measures an interval as sand falls. A clock can show the time with moving hands. These devices developed in different places and periods. There was no single inventor of every kind of clock.

Remember this: Shadow, sand, moving hands.

Talk together: When would a sundial be difficult to use?

Match each timekeeper to its description.

Draw a line from each timekeeper to its description.



Sundial

Shows time with moving hands

Hourglass

Uses a shadow in sunlight

Clock with hands

Measures an interval with falling sand

Talk together: which one needs sunshine?

Printing



Printing lets a design be repeated.

Imagine watching a printer ink a carved block, press paper against it, then lift a printed sheet. The same block can make another copy. People in China printed books centuries before Gutenberg's work in Europe. Movable type also developed in East Asia. Printing has grown through many people's ideas.

Remember this: Ink, press, lift, repeat.

Talk together: Which page would our family like to share?

Number the printing steps from 1 to 3.



Write 1, 2 and 3 in the empty boxes. Use the discovery page to help.

Lift the paper to see the print.

Spread ink on the carved block.

Press the paper against the inked block.

Pretend design: draw a pattern you would like to print twice.

Photography



Photography records images using light.

Imagine comparing a large old camera with a camera used today. Both need light to make a photograph. Early photographic processes used light-sensitive materials; digital cameras use electronic sensors. Many people contributed to photography over time. A photograph can keep an image of a family moment long after it has passed.

Remember this: Light comes in; an image stays.

Talk together: Which family moment would you like to photograph?

Look, cover, then recall the details.

Look at the previous scene. Cover it with a spare sheet.
Say or draw your answers without looking back.



What color was the mug?

Which plant was on the table?

What round toy was on the table?

Communication across distance



Messages can travel in different ways.

Imagine sending a thought to someone far away. A letter carries words on paper. An electric telegraph sends signals along wires to represent a message. A modern phone can carry voices across distance. These methods overlap: people still send letters today. Communication changed through the work of many people.

Remember this: A thought travels beyond the room.

Talk together: Who would you like to send a message to?

Match the tools, then draw a message.

Match each tool to its job. Then draw a message for someone you love.



- Letter

☐

☐

Carries a voice across distance
- Electric telegraph

☐

☐

Carries words on paper
- Modern phone

☐

☐

Sends coded signals along wires

Pretend message: draw what you would like to share.

Cut-out object cards

Grown-ups: cut along the dashed lines. Use with the clue cards.



Wheeled cart



Paper



Sundial



Printing block



Camera



Electric telegraph

Cut-out clue cards

Keep the same size as the object cards. No pair numbers are shown.

Records an image using
light.

A sheet made from fibres
can hold writing and
pictures.

Sends coded electrical
signals along wires.

Helps a cart roll along
with its load.

Repeats an inked design
on more than one sheet.

Uses a shadow in
sunlight to show the time
of day.

Remember the inventions

Say or write the invention that fits each clue. Guessing is welcome.

Repeats an inked design on more than one sheet.

Helps a cart roll along with its load.

Records an image using light.

A sheet made from fibres can hold writing and pictures.

Sends coded electrical signals along wires.

Uses a shadow in sunlight to show the time of day.

A few clues for another day

Say or draw an answer. Then look back together when you are ready.

What helps a cart roll?

Name one thing we can keep on paper.

Which timekeeper needs sunshine?

What do you put on a block before printing?

What does a camera need to record an image?

Name one way to send a message far away.

Draw your own invention

Draw an invention that would help your family. Add a name if you wish.



What would your invention help your family do?



A curious explorer



This celebrates

for discovering, playing, asking questions
and trying again.

Shared with: _____ Date: _____

A guide to the answers

Page 4 · Wheels

Circle Bicycle and Toy cart. Drawing: any family invention is welcome.

Page 6 · Paper scene

Accept any three visible foreground objects: bowl, brush, book. Drawing or naming is fine.

Page 8 · Timekeepers

Sundial → shadow in sunlight. Hourglass → falling sand. Clock with hands → moving hands. The sundial needs sunshine.

Page 10 · Printing order

Top to bottom: 3, 1, 2. Ink the block, press paper, lift paper. Patterns are imaginative; there is no fixed answer.

Page 12 · Photograph scene

Red mug; yellow flower; blue ball. For a grayscale print, accept mug, flower and ball without requiring colors.

Page 14 · Messages

Letter → words on paper. Electric telegraph → coded signals along wires. Modern phone → voice across distance. Drawings have no fixed answer.

Pages 15–17 · Card pairs and clues

Wheeled cart → moving a load. Paper → fibres holding writing. Sundial → shadow. Printing block → repeating an inked design. Camera → image using light. Electric telegraph → coded electrical signals. Page 17 order: printing block, wheeled cart, camera, paper, electric telegraph, sundial.

Page 18 · Revisit

Wheels; writing or pictures; sundial; ink; light; a letter, telegraph or phone. Accept equivalent descriptions. Page 19 is imaginative, with no fixed answer.

Where the history comes from

British Museum: cart with solid wheels

An ancient relief depicts a load transported on a cart with solid wooden wheels; no named inventor is assigned.

Smithsonian: The Art of the Qur'an

Paper-making developed in China and spread westward. Paper is distinct from earlier writing supports such as papyrus and clay.

NIST: A Walk Through Time — Early Clocks

Timekeepers use processes including shadows, falling sand and regular motion. This historical archive is dated 2004.

British Library, IDP: The Diamond Sutra

A dated Chinese woodblock-printed book survives from 868 CE, well before Gutenberg's European printing work.

Smithsonian Lemelson Center: Type and printing

Discusses Bi Sheng's movable type in China and Gutenberg's later work in Europe.

Science Museum Group: William Henry Fox Talbot

Describes light-sensitive photographic materials and distinct contributions by Talbot and Daguerre.

Science Museum Group: Collecting photography

Explains changes from chemically sensitized materials to digital photography.

Science Museum: Information Age guide

Documents electrical telegraph networks and their use for sending information along wires.

Source titles are clickable in the PDF. Researched 16 October 2026.
Illustrations are generated fictional reconstructions, not historical evidence.
Paper-making and other processes are simplified for a shared activity.