FOR EARLY-NUMERACY TEACHERS

56 chat prompts

Prompts for Early Numeracy.

Ready-to-use prompts for planning, teaching and reflection.

The right tool at the right time.
Part of the WISE Framework for Education at choosewise.education.

VOL. 17

Glossary

A few terms that recur throughout this guide. If you already know them, skip ahead to the framework on the next page.

AI — Artificial Intelligence

An attempt to make machines mimic brain functions — to "think" and learn roughly the way humans do. We don't fully understand how the brain works, but we can try to replicate the parts we do understand.

Prompt

An instruction given to a chatbot to get a desired response or task performed.

Iterate

After receiving a response from a chatbot, you refine and clarify the parts you're not satisfied with — sharpening the answer until it's what you want. The better your starting prompt, the fewer iterations you'll need.

Chatbot

A chatbot has been trained to find patterns in large amounts of text. It uses those patterns to generate a response to your prompt. The answer is produced in real time.

GPT

The underlying model (Generative Pre-trained Transformer) that a chatbot uses. The same GPT can power different chatbots — for example, Copilot and ChatGPT have both used OpenAI's GPT.

Generative AI

AI that creates (generates) text, images, video, or sound in real time when prompted to do so.

Bias

AI responses can be skewed or partial, depending on the data the AI was trained on and the biases present in that data. These biases are harder to spot in chatbots than in image-generating AI.

Hallucination

The text you receive from a chatbot is based on patterns in its training data, but word generation also involves randomness — meaning generated words can sometimes create a meaning that simply isn't true.

A framework for writing your own prompts

Role: Act as an experienced physics teacher.

Task: Create a lesson plan that introduces year 8 students to optics.

Context: I teach at a middle school, have 25 students in my class, and the lesson is 60 minutes long.

Format: Link content and activities to the physics curriculum and give me a plan that describes each part of the lesson and the materials required.

Tone: Use a formal but friendly tone.

A few chatbots to know

AI can also generate images and more, but we focus here on chat capabilities.

ChatGPT — OpenAI's chatbot

Gemini — Google's chatbot

NotebookLM — Google's tool that can, among other things, generate a two-voice podcast

Copilot — Microsoft's chatbot

Claude — Anthropic's chatbot

Perplexity — From San Francisco, was early to include source links

Duck AI — DuckDuckGo's chatbot, lets you pick among several GPTs

Mistral AI — A chatbot from France

Most chatbots have age restrictions.

BEFORE YOU START

How to use the prompts

All the prompts are starting points — examples to get you going.
Adapt them to fit your context.

After using a chatbot for a while, you'll learn what kinds of prompts work better or worse. Try the same prompt twice — first as-is, then with the prefix "Act as an experienced expert teacher in [subject]" — and see whether the quality of the response improves. A good response means a good prompt. A poor response means the prompt needs more context or adjustment. Some chatbots are better than others at certain tasks, so if you're not satisfied despite multiple tries, consider switching chatbot.

Brackets and privacy

You paste the prompt text into the chatbot's input field. Wherever brackets *[like this]* appear, replace the text inside with whatever fits your context.

Always double-check the responses — chatbot output is not guaranteed to be accurate.

Note: Think carefully before uploading texts or documents. Never upload personal data or sensitive information. Mind GDPR.

56 PROMPTS

Learning to Count

01 Create 5 simple addition problems for grade 1 with numbers up to 10 and provide an example of how to explain the solution using pictures of apples. Generate 5 subtraction problems for grade 2 with numbers up to 20 and write a short explanation for students on how to use a number line to solve them.

02 Write 10 multiplication problems for grade 3 using the 2 and 5 times tables and provide an example of how to draw groups of objects to illustrate 2 × 3.

03 Create 5 division problems for grade 4 with numbers up to 50 and provide a short explanation of how students can think of division as sharing equally. Generate 5 addition problems for grade 2 where students add two two-digit numbers without regrouping and provide an example of how to use number bonds to ten to solve them.

04 Write 5 subtraction problems for grade 3 with regrouping and provide an example of how to explain the solution using base-10 materials.

05 Create 10 multiplication problems for grade 4 using the 3 and 4 times tables and provide an example of how to use repeated addition to understand multiplication. Generate 5 division problems for grade 5 where students divide three-digit numbers by single-digit numbers and write a short explanation of how they can use multiplication to check the answer.

06 Write 5 mixed addition and subtraction problems for grade 1 with numbers up to 15 and provide an example of how to use fingers to work out the answer.

07 Create 5 problems for grade 6 where students multiply two-digit numbers by single-digit numbers and provide an example of how to break the numbers into tens and ones to solve them. Problem Solving

08 Write 5 word problems for grade 2 set on a day at a farm where students use addition and subtraction with numbers up to 20 and provide an example of how to solve one of them. Generate 5 word problems for grade 4 about a class trip to London where students use multiplication and division with numbers up to 100 and provide an example of the solution.

09 Create 5 word problems for grade 3 set at a market where students add and subtract amounts of money and provide an example of how to draw coins and notes to solve one problem.

10 Write 5 word problems for grade 5 about a sports day where students use all four operations with numbers up to 500 and provide an example of how to solve one of them step by step. Generate 5 word problems for grade 1 about a play day in the park where students add numbers up to 10 and provide an example of how to use pictures to explain the solution.

11 Create 5 word problems for grade 6 about a family's holiday budget where students use multiplication and division with decimals and provide an example of how to solve one of them.

12 Write 5 word problems for grade 3 about a baking day where students multiply and add ingredient quantities in cups and provide an example of how to draw measurements to solve one problem. Generate 5 word problems for grade 4 about a pet shop where students use division and subtraction to calculate how many animals are left and provide an example of the solution.

13 Create 5 word problems for grade 2 about an orchard where students subtract and add numbers of pieces of fruit and provide an example of how to use a number line to solve one of them.

14 Write 5 word problems for grade 5 about a school trip where students use multiplication and addition to calculate times and distances and provide an example of how to solve one of them. Mathematical Communication

15 Create 5 questions for grade 3 that students can discuss in pairs about how they solved an addition problem with regrouping and provide an example of a student explanation. Generate a short word problem for grade 4 about sharing sweets among friends and ask students to explain in writing how they solved it using division and provide an example of an explanation.

16 Write 5 discussion questions for grade 5 about why multiplication is useful in everyday life and provide an example of an answer a student might give.

17 Create a task for grade 2 where students draw and write an explanation of how they added 8 + 5 and provide an example of a student's drawing and text. Generate 5 questions for grade 6 that students can use to discuss different strategies for solving a multiplication problem with decimals and provide an example of one strategy.

18 Write a short word problem for grade 3 about buying books and ask students to explain verbally how they subtracted the price from their budget and provide an example of a student explanation.

19 Create 5 questions for grade 1 that students can discuss in a group about how they worked out 6 + 3 and provide an example of how a student can explain using objects. Generate a word problem for grade 5 about planning a party and ask students to write an explanation of how they multiplied the number of guests by the cost per person and provide an example.

20 Write 5 discussion questions for grade 4 about how division can be used to share things equally and provide an example of a student response.

21 Create a task for grade 6 where students write a short text about how they solved a division problem with a remainder and provide an example of a student's text. Practical Application

22 Write 5 problems for grade 3 where students add and subtract times during a school day and provide an example of how to draw a clock to solve one of them. Generate 5 problems for grade 4 where students multiply and divide to calculate how much material is needed for a school project and provide an example of the solution.

23 Create 5 problems for grade 2 where students add and subtract lengths in cm to measure objects in the classroom and provide an example of how to use a ruler.

24 Write 5 problems for grade 5 where students use all four operations to plan a class party within a budget and provide an example of how to solve one of them. Generate 5 problems for grade 1 where students count the number of objects in a box using addition up to 10 and provide an example of how to draw the objects to count them.

25 Create 5 problems for grade 6 where students use decimals to calculate discounts in a shop and provide an example of how to solve one of them step by step.

26 Write 5 problems for grade 3 where students use multiplication to calculate how many plants are needed in a garden and provide an example of how to draw rows of plants. Generate 5 problems for grade 4 where students subtract and add weights in kg to pack a backpack and provide an example of how to represent the weight with a picture.

27 Create 5 problems for grade 2 where students count money to buy items at a pretend market and provide an example of how to draw coins to solve one of them.

28 Write 5 problems for grade 5 where students use division and multiplication to split groups of students for an activity and provide an example of how to solve one of them. Geometry and Measurement

29 Create 5 problems for grade 3 where students measure the length of objects in the classroom in cm and add them to find a total length and provide an example of how to draw the objects. Generate 5 problems for grade 4 where students calculate the perimeter of simple rectangles with given measurements in cm and provide an example of how to explain perimeter using a picture.

30 Write 5 problems for grade 2 where students count the number of squares in a grid to understand area and provide an example of how to draw a grid with 3 × 4 squares.

31 Create 5 problems for grade 5 where students calculate the area of rectangles with measurements in metres and provide an example of how to explain area as length × width. Generate 5 problems for grade 1 where students sort shapes such as circles, squares, and triangles and count the number of each shape and provide an example of how to draw the shapes.

32 Write 5 problems for grade 6 where students calculate the volume of simple cuboids with given measurements in cm and provide an example of how to explain volume as length × width × height.

33 Create 5 problems for grade 3 where students measure and add distances in metres on a school playground and provide an example of how to draw a map to show the distances. Generate 5 problems for grade 4 where students identify and count the sides of different polygons such as triangles and pentagons and provide an example of how to draw a polygon.

34 Write 5 problems for grade 2 where students compare the lengths of objects in cm and subtract to find the difference and provide an example of how to show the difference using a number line.

35 Create 5 problems for grade 5 where students calculate the perimeter of composite shapes made up of rectangles and provide an example of how to break the shape into smaller parts. Fractions and Percentages

36 Write 5 problems for grade 4 where students add simple fractions with the same denominator such as 1/4 + 2/4 and provide an example of how to draw circles to show the fractions. Generate 5 problems for grade 5 where students subtract fractions with the same denominator such as 3/5 – 1/5 and provide an example of how to explain this using a picture of a cake.

37 Create 5 problems for grade 3 where students identify fractions such as 1/2 and 1/3 by dividing shapes into equal parts and provide an example of how to draw a divided rectangle.

38 Write 5 problems for grade 6 where students convert fractions to percentages such as 1/4 to 25% and provide an example of how to explain the conversion step by step. Generate 5 problems for grade 5 where students calculate 10% of various amounts of money and provide an example of how to explain percentages as a part of 100.

39 Create 5 problems for grade 4 where students compare fractions such as 1/3 and 1/4 by drawing them and provide an example of how to show which fraction is larger using a picture.

40 Write 5 problems for grade 6 where students calculate a 25% discount on various prices and provide an example of how to solve one of them using fractions. Generate 5 problems for grade 3 where students divide a whole into fractions such as 1/2, 1/4, and 3/4 and provide an example of how to draw a pizza to show the fractions.

41 Create 5 problems for grade 5 where students add fractions with different denominators such as 1/2 + 1/4 and provide an example of how to find a common denominator.

42 Write 5 problems for grade 6 where students convert percentages to fractions such as 50% to 1/2 and provide an example of how to explain the relationship between percentages and fractions. Logical Thinking

43 Create 5 pattern problems for grade 2 where students fill in the next number in sequences such as 2, 4, 6, __ and provide an example of how to explain the pattern using addition. Generate 5 logic problems for grade 4 where students use addition and subtraction to solve riddles about numbers of animals and provide an example of a solution.

44 Write 5 problems for grade 3 where students identify patterns in multiplication such as 5, 10, 15, __ and provide an example of how to explain the pattern using the 5 times table.

45 Create 5 logic problems for grade 5 where students use multiplication and division to solve riddles about numbers of objects and provide an example of how to solve one of them. Generate 5 problems for grade 1 where students fill in missing numbers in simple sequences such as 1, 2, __, 4 and provide an example of how to plot the numbers on a number line.

46 Write 5 problems for grade 6 where students solve pattern problems involving fractions such as 1/2, 1/4, 1/8, __ and provide an example of how to explain the pattern.

47 Create 5 logic problems for grade 3 where students use addition to solve riddles about numbers of children in different groups and provide an example of a solution. Generate 5 problems for grade 4 where students identify patterns in geometric sequences such as square, square, triangle, __ and provide an example of how to draw the pattern.

48 Write 5 logic problems for grade 5 where students use division to solve riddles about sharing resources and provide an example of how to explain the solution.

49 Create 5 problems for grade 2 where students solve simple puzzles using addition such as 3 + __ = 7 and provide an example of how to show the solution using fingers. Maths in Everyday Life

50 Write 5 problems for grade 3 where students add and subtract times in a family's daily schedule and provide an example of how to draw a clock to show the times. Generate 5 problems for grade 4 where students use multiplication to calculate how much food is needed for a dinner and provide an example of how to display the quantities in a table.

51 Create 5 problems for grade 2 where students count money to buy snacks at a café and provide an example of how to draw coins to solve one of them.

52 Write 5 problems for grade 5 where students use percentages to calculate sale prices on clothing and provide an example of how to explain the discount step by step. Generate 5 problems for grade 1 where students add the number of toys in a box and provide an example of how to draw the toys to count them.

53 Create 5 problems for grade 6 where students use fractions to divide a pizza among friends and provide an example of how to draw the pizza to show the fractions.

54 Write 5 problems for grade 3 where students measure and add distances in metres to plan a game on the school playground and provide an example of how to draw a map. Generate 5 problems for grade 4 where students subtract to calculate how much time is left before an activity and provide an example of how to show the time on a clock.

55 Create 5 problems for grade 2 where students add the number of books in different stacks in a library and provide an example of how to draw the stacks to count them.

56 Write 5 problems for grade 5 where students use multiplication to calculate the total cost of buying tickets for a class trip and provide an example of the solution.

CONTINUE ON THE WEB

The right tool at the right time.

This collection is part of a library of AI prompts for every role in the school — free to use, adapt, and share.

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Four questions that turn any "should we use this AI tool?" conversation into a structured decision — choosewise.education/wise

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