

# Math Scavenger Hunt

## Teacher Prompt Guide

*Fill in the blanks to create your own custom scavenger hunt*

### What Is This Guide?

This guide gives you a ready-to-use AI prompt for generating a printable PDF math scavenger hunt. All you need to do is fill in the bracketed fields for your specific class. The AI will handle the rest — writing the questions, designing the card layout, building the scrambled loop, creating the teacher answer key, and producing the student recording sheet.

This prompt has been tested and refined across multiple grade levels (Grades 3–8) and a wide range of standards, including OA, NBT, NF, EE, and NS clusters. Every option in this guide reflects a real decision made during those hunts.

### How a Math Scavenger Hunt Works

#### How a math scavenger hunt works

Follow these steps to complete the activity

- 1 Start at any card**  
Your teacher will post cards around the room. You can begin at whichever card is closest to you — there is no set starting order.
- 2 Read the question and solve it**  
Each card has a math problem. Solve it and find your answer — either circle a multiple-choice letter, or write your work in the box for constructed response cards.
- 3 Find your answer on another card**  
Look at the top of the other cards posted around the room. One of them will show "IF YOUR ANSWER WAS..." with your answer. That card is your next stop.
- 4 Record as you go**  
Write your answer on your recording sheet each time you solve a card. For constructed response cards, show your work in the box provided.
- 5 Keep going until you loop back**  
You have completed the hunt when you return to the card where you started. You should have visited every card exactly once.

 If you can't find a card that matches your answer, double-check your work — your answer may need to be corrected before you can move on.

## The Master Prompt (copy and paste this — then fill in the brackets)

Create a printable PDF scavenger hunt for **[GRADE LEVEL]** math with **[NUMBER OF CARDS]** questions aligned to the following Common Core standards: **[LIST STANDARDS]**.

Question format: [MC ONLY / CR ONLY / MIXED — specify split, e.g. '5 multiple choice and 5 constructed response'].

Difficulty: **[EASY / EASY-TO-MEDIUM / MEDIUM / CHALLENGING]**.

Student context: [GENERAL EDUCATION / ELL — English + Spanish / ELL — English only / SPECIAL EDUCATION / MIXED].

Experience level: [FIRST TIME doing this activity / EXPERIENCED — they have done this before].

Real-world problems: [ALL problems should be real-world / ABOUT HALF should be real-world / COMPUTATION ONLY — no real-world context needed].

Hints: [NO HINTS / YES — vocabulary definitions and reminders only, not on every card, do not give away the answer].

Language: **[ENGLISH ONLY / BILINGUAL — English and Spanish]**.

Additional instructions: [ADD ANY SPECIAL REQUESTS HERE, or type NONE].

**Note:** Orange bracketed fields are the parts you replace. Everything else stays exactly as written. Delete the brackets and the placeholder text inside them — keep the surrounding sentence structure.

## Fill-in-the-Blanks Reference

Field	What to fill in	Examples from our hunts
<b>[GRADE LEVEL]</b>	The grade you are teaching	<i>Grade 3, Grade 4, Grade 8</i>
<b>[NUMBER OF CARDS]</b>	Total number of station cards (loop size)	<i>8, 10, or 12 — 10 is most common</i>

<b>[LIST STANDARDS]</b>	CCSS codes, one per line or comma-separated	<i>4.NBT.5, 4.NBT.6, 4.NBT.1</i>
<b>[MC ONLY / CR ONLY / MIXED]</b>	Question format across the hunt	<i>5 multiple choice and 5 constructed response</i>
<b>[DIFFICULTY]</b>	Overall challenge level for your students	<i>Easy-to-medium (first time); Medium (experienced)</i>
<b>[STUDENT CONTEXT]</b>	Who is in your classroom	<i>ELL — English + Spanish; General Education</i>
<b>[EXPERIENCE LEVEL]</b>	Whether students have done a scavenger hunt before	<i>First time doing this activity</i>
<b>[REAL-WORLD PROBLEMS]</b>	How many problems should have real-world context	<i>About half; All problems; Computation only</i>
<b>[HINTS]</b>	Whether scaffold hints appear on select cards	<i>No hints; Yes — vocab/reminders only</i>
<b>[LANGUAGE]</b>	Display language for questions	<i>English only; Bilingual — English and Spanish</i>
<b>[ADDITIONAL INSTRUCTIONS]</b>	Any other specific requests or constraints	<i>See examples in the next section</i>

## Options Guide — What Each Setting Does

### Question Format

Format option	Your choices
<b>MC only</b>	All 10 cards have four answer choices (A, B, C, D). Students circle and bubble.
<b>CR only</b>	All cards have a write-on work area. Students show steps and write their answer.
<b>Mixed — equal split</b>	Half MC, half CR. CR cards get a cream background so students know at a glance.
<b>Mixed — custom split</b>	Specify any ratio, e.g. '3 CR / 7 MC'. CR cards always get the cream background.

### Difficulty

Level	Your choices
<b>Easy</b>	Single-step, small friendly numbers. Great for confidence-building or first exposure.
<b>Easy-to-medium</b>	Mostly single-step with 1-2 two-step problems. Good for first-time hunts.
<b>Medium</b>	Mix of single- and multi-step. Standard grade-level complexity.

<b>Challenging</b>	Multi-step, larger numbers, problems that require reasoning. For experienced students.
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## Real-World Problems

Setting	Your choices
<b>All real-world</b>	Every card uses a story context (baking, sports, shopping, animals, etc.).
<b>About half real-world</b>	~5 cards use real-world contexts; ~5 are direct computation. Good balance.
<b>Computation only</b>	All problems are bare numbers (e.g., $347 \times 6 = ?$ ). Best for fluency practice.

## Hints

Setting	Your choices
<b>No hints</b>	Cards have no hint bar. Students work independently. Recommended for assessments.
<b>Vocab/reminder hints</b>	A green hint bar appears on select cards (not all). Provides vocabulary definitions or reminders — never a rule that gives the answer away. E.g., 'Vocab: An exponent tells you how many times to multiply the base by itself.'
<b>Scaffolded hints</b>	Stronger hints that name the operation or strategy needed. Good for SpEd or ELL support.

## Language

Setting	Your choices
<b>English only</b>	Questions appear once in English. Standard for most classrooms.
<b>Bilingual EN/ES</b>	Each question appears in English (bold) and Spanish (italic) on every card, separated by a thin divider. The recording sheet and footer are also bilingual.

## Additional Instructions — Examples You Can Copy

Paste any of these into the [ADDITIONAL INSTRUCTIONS] field, or combine multiple:

### First-time / confidence-building

This is the first time students are doing this activity. Keep questions accessible and confidence-building. Use familiar, visualizable real-world contexts.

### Special education adaptations

This is a self-contained special education classroom. Students need confidence-building problems. Use scaffolded hints on every card. Spread answer choices far apart — no close-call distractors. Keep wording to one step.

### **Risk-averse students**

Students are risk-averse and may shut down when frustrated. Do not make questions too challenging. Keep numbers manageable and problems single-step or simple two-step.

### **Specific problem type mix**

Make half of the problems real-world word problems that are visualizable and age-appropriate. The other half should be direct computation problems.

### **Specific standard focus within a cluster**

For 5.NF, cover the full cluster: include 5.NF.1 (add fractions with unlike denominators), 5.NF.2 (fraction word problems), 5.NF.3 (fraction as division), 5.NF.4 (multiply fraction by whole number), and 5.NF.7 (divide unit fraction by whole number).

### **Standards to exclude**

Do NOT include questions on 8.EE.4 (operations in scientific notation). Only use 8.EE.3 (estimate and compare using powers of 10).

### **Editable Word document**

Please also provide this as an editable Word document (.docx) so I can modify questions, answers, and formatting directly.

## **Complete Filled-In Examples**

*These are real prompts used to generate the hunts in this series. Use them as models.*

### **Grade 4 — ELL, Bilingual, Multiplicative Comparison**

Create a printable PDF scavenger hunt for Grade 4 math with 10 questions aligned to the following Common Core standards: 4.OA.1, 4.OA.2.

Question format: 10 multiple choice.

Difficulty: Easy-to-medium.

Student context: ELL — English + Spanish.

Experience level: First time doing this activity.

Real-world problems: About half should be real-world.

Hints: No hints.

Language: Bilingual — English and Spanish.

Additional instructions: Students are risk-averse. Keep problems accessible and confidence-building. Focus on when to multiply vs. divide in comparison problems.

### **Grade 5 — General Ed, First Time, Full NF Cluster**

Create a printable PDF scavenger hunt for Grade 5 math with 10 questions aligned to the following Common Core standards: 5.NBT.5, 5.NBT.6, 5.NBT.7 (adding, subtracting, and multiplying decimals), 5.NF.1, 5.NF.2, 5.NF.3, 5.NF.4, 5.NF.7.

Question format: 10 multiple choice.

Difficulty: Easy-to-medium.

Student context: General education.

Experience level: First time doing this activity.

Real-world problems: About half should be real-world.

Hints: No hints.

Language: English only.

Additional instructions: Do not make questions too challenging. Avoid unicode fraction characters — write fractions as  $1/2$ ,  $3/4$ , etc.

## Grade 8 — Bilingual, Mixed MC + CR, Select Hints

Create a printable PDF scavenger hunt for Grade 8 math with 10 questions aligned to the following Common Core standards: 8.EE.1, 8.EE.2, 8.EE.3, 8.NS.1, 8.NS.2.

Question format: 5 multiple choice and 5 constructed response.

Difficulty: Easy-to-medium.

Student context: ELL — English + Spanish.

Experience level: They have done this before.

Real-world problems: About half should be real-world.

Hints: Yes — vocabulary definitions and reminders only, not on every card, do not give away the answer.

Language: Bilingual — English and Spanish.

Additional instructions: Do NOT include 8.EE.4 content.

For 8.EE.3, focus on using powers of 10 to estimate and compare very large and very small quantities.

## Card Layout Reference

Every card in every hunt follows this structure, top to bottom:

Zone	Name	Description
1	Number bar (top)	Gold/amber background. Large card number. CCSS tag on the right. CR badge on the

		left for constructed response cards.
2	Answer banner	Dark blue background. Reads 'IF YOUR ANSWER WAS...' with the previous card's correct answer displayed in large text. For MC predecessor: letter circle + value. For CR predecessor: just the value, centered large.
3	Question zone	Light gray (MC) or warm cream (CR). 'QUESTION:' label in blue. Question text in bold. For bilingual cards: English bold above, thin divider, Spanish italic below.
4	Hint bar (if enabled)	Soft green background with a green border. Appears on select cards only. Vocabulary or reminder — never answer-giving.
5	Choices or work area	MC: 2x2 tile grid with letter-badge circles. CR: Open work area with 5 lined rows and 'My answer:' line at bottom.
6	Footer	Dark blue. Navigation instruction in italic text.

## How the Scrambled Loop Works

Every scavenger hunt uses a scrambled closed loop — a sequence that visits every card exactly once before returning to the start. This means:

**Students can start at any card.** No matter where a student begins, they will visit all 10 cards in a different order than their neighbor, which reduces copying.

**No consecutive jumps.** The loop is always generated so that no card points to the next-numbered card (e.g., Card 3 never points to Card 4). This prevents students from just walking in numbered order.

**The answer chain is the navigation.** The correct answer to each card is displayed at the top of the next card in the loop. Students self-check as they move.

### Example loop from our Grade 4 hunt (10 cards):

Loop order: 6 -> 9 -> 2 -> 4 -> 8 -> 5 -> 10 -> 1 -> 7 -> 3 -> 6 (loops back)

A student starting at Card 6 will visit: 6, 9, 2, 4, 8, 5, 10, 1, 7, 3, then back to 6.

A student starting at Card 2 will visit the same 10 cards in a different sequence.

## Tips, Tricks & Common Issues

Issue / Goal	What to do
<b>Fractions display as squares</b>	This happens when unicode fraction characters (like $\frac{1}{2}$ or $\frac{1}{4}$ ) are used. Add this to your Additional Instructions: 'Write all fractions as plain text: 1/2, 3/4, 2/3, etc. Do not use unicode fraction characters.'
<b>Exponents display as squares</b>	Same issue as fractions. Add: 'Write all exponents using caret notation: 2^5, 3^4, 10^6. Do not use unicode superscript characters.'
<b>Wrong standard included</b>	Add a negative instruction: 'Do NOT include questions on [standard]. Only use [correct standards].' This happened with 8.EE.4 being included when only 8.EE.3 was requested.

<b>Questions are too hard or too easy</b>	Be specific in the difficulty field. 'Easy-to-medium' and 'first time' together signal accessible questions. You can also add: 'Keep numbers under 100' or 'Use only single-step problems.'
<b>Want a Word doc to edit the questions</b>	Add to Additional Instructions: 'Please also provide this as an editable Word document (.docx) so teachers can modify questions directly in Word.'
<b>Want bilingual but only for students, not the teacher key</b>	Add: 'The student cards should be bilingual (English and Spanish). The teacher answer key and recording sheet can be English only.'
<b>CR and MC look the same</b>	The AI automatically gives CR cards a warm cream background and a 'CONSTRUCTED RESPONSE' badge in the number bar. You do not need to request this — it is built into the design.
<b>Too many cards to manage</b>	8-card hunts work well for 40-minute periods. 10-card hunts work for 50-60 minutes. 12-card hunts are best for block periods. Specify the number in your prompt.

## Scavenger Hunts Produced With This System

Grade	Standards	Format	Context
<b>Grade 3</b>	3.OA.8, 3.NF.1, 3.NF.2, 3.NF.3	10 MC	General Ed, English only, first time
<b>Grade 3</b>	3.OA.3, 3.OA.8	5 MC + 5 CR	General Ed, English only, multi-step real-world
<b>Grade 4</b>	4.OA.1, 4.OA.2	10 MC	ELL, Bilingual EN/ES, risk-averse
<b>Grade 4</b>	4.OA.2, 4.NBT.5, 4.NBT.6, 4.NF.3	5 MC + 5 CR	General Ed, English only, first time
<b>Grade 4</b>	4.NBT.1, 4.NBT.5, 4.NBT.6	5 MC + 5 CR	General Ed, English only, first time
<b>Grade 5</b>	5.NBT.5, 5.NBT.6, 5.NBT.7, 5.NF.1–5.NF.7	10 MC	General Ed, English only, first time
<b>Grade 6</b>	6.G.2, 6.RP.1–3, 6.EE.1, 6.EE.5, 6.EE.7–9	10 MC	General Ed, English only
<b>Grade 8</b>	8.NS.1, 8.NS.2 (SpEd)	6 MC	Special Ed, English only, confidence-building
<b>Grade 8</b>	8.EE.1, 8.EE.2, 8.EE.3, 8.NS.1, 8.NS.2	5 MC + 5 CR	ELL, Bilingual EN/ES, select hints

*This prompt guide was built from real classroom scavenger hunts across Grades 3–8. Every option reflects a tested design decision.*