

Build and draw our world



Kindergarten | Geometry

NC.K.G.5

Seven teaching sections, 30 choice prompts and 30 observed tasks. Teacher scripts, original diagrams, practical materials, blank work mats, complete keys and individual evidence records.

Use short sessions across days. This reusable bank is not a 60-item test or a requirement for 80 minutes of seatwork. Adult read-aloud is expected.

Aligned to the verified 2025 North Carolina Kindergarten Quick Reference Guide, printed pages 28-30. Current implemented standards; excludes the future 2028-29 revision.

Free sample | Contents

NC.K.G.5 | Kindergarten mathematics

This sample contains 20 complete selected pages from the 114-page resource, plus this sample contents page. Original printed page numbers are retained. Gaps are intentional.

Included original pages: 1-16, 45-46, 82, 97

Representative activities

M01: sample PDF page(s) 16; original page(s) 15

M02: sample PDF page(s) 17; original page(s) 16

O01: sample PDF page(s) 18; original page(s) 45

O02: sample PDF page(s) 19; original page(s) 46

Selected teacher prompts and keys: original page(s) 82, 97

Using this sample

Read the preparation and access guidance before using a selected activity.
Keep teacher keys and private preparation pages separate from student copies.
Use the original resource contents to see the scope of the complete packet.

Complete paid download

The complete resource includes the full PDF task bank and teaching materials.

TEACHER GUIDE

Plan your packet

Pages follow this order: standard and coverage; access and materials; worked model; seven section scripts; blank organizers; choice cards M01-M30; performance cards O01-O30; construction kits where needed; individual evidence forms; keys; inquiry and sources. See the editable page manifest for exact page references.

Print only selected student cards. Keep preparation text and keys private. Read prompts and every answer option in the same neutral tone; repeat without emphasizing the correct answer. Let children point, speak, sign or use AAC. Do not require independent reading or handwriting.

Begin with 5-12 minutes of play, modeling or discussion. Across several days, choose one or two performance cards and, if helpful, one choice card per session. Stop when attention or access makes the evidence unreliable. Record remaining tasks as N/O.

Choice answers diagnose ideas. They do not show that a child compared real shapes, constructed a model, or composed a target. Collect individual hands-on evidence, including after partner work.

Access supports: large high-contrast cards, tactile outlines, seated workspace, extra response time, stable tray and adapted grip. Adults may stabilize materials or serve as the child-directed motor partner; record who made each mathematical decision. Do not score motor precision, spelling or accent.

A fresh performance, without a copied model or peer solution, is needed when checking independent reasoning. A correct coached attempt remains useful teaching evidence; record the cue.

Visual edition: M05-M07 (pp. 19-21) show familiar object contexts; M10 (p. 24) shows the faulty starting figure. O01 (p. 45) adds a sign context outside the response space. Teaching-only build/draw comparison: p. 114, linked to the strips on p. 75. Fresh independent tasks and all keys are unchanged.

OFFICIAL ALIGNMENT

The standard and evidence

NC.K.G.5

Model shapes in the world by:

- Building and drawing triangles, rectangles, squares, hexagons, circles.
- Building cubes, cones, spheres, and cylinders.

I can build AND draw triangles, rectangles, squares, hexagons and circles.

I can build cubes, cones, spheres and cylinders.

I can show how my model matches something in the world.

Essential question: How can we make a model that keeps the important shape features?

Coverage and required evidence

Build/draw pairs: triangle O01/O02; rectangle O03/O04; square O05/O06; hexagon O07/O08; circle O09/O10. Solids: cube O11, cone O12, sphere O13, cylinder O14. O15-O19 and O24-O28 require both modes again; O20-O23 and O29-O30 require fresh solid construction.

TEACHER PREPARATION

Materials, language and access

Prepare non-toxic age-appropriate modeling dough, broad crayons, blunt cardboard strips, reusable tack and large square cardboard panels. Child-safe materials only; adult prepares any cutting and tape starts. Avoid food, allergens, tiny beads, toothpicks, skewers and sharp-edged cans. Real objects such as a book, tile, ball or sealed tub supply contexts. A cone can be modeled as solid dough even if the real ice-cream cone is hollow.

Prior learning: handling and noticing shapes, tracing a boundary, and taking turns. Revisit words in context: side, corner, straight, curved, flat, solid, same, different, turn, slide, join. Children may say "pointy," "round," "box-like," or show a feature; introduce precise words without requiring them.

Neutral prompt: "Show me what you notice." Then allow wait time. Do not point to the distinguishing feature, name the needed piece, or move the child's piece into place during an independent observation.

Multilingual support: connect a home-language shape word to the object; use gestures and side-by-side examples. Read all four options, allowing the child to request repeats. A language difference is not evidence of a geometry error.

Challenge: ask for a different arrangement, size, orientation or example after the basic task. Do not add a speed demand.

WORKED TEACHER MODEL

Make the thinking visible

Model a square window: join four equal blunt strips into a closed frame with square corners. Say: "Four equal sides are not enough if I push this into a slanting shape. I also check the corners." Draw the same square on paper. Point to corresponding sides and corners.



Model a can: roll a thick dough body, gently flatten two opposite ends, and smooth the curved side. Say: "These two round ends are flat. The side curves around. I made a cylinder." Turn it so the children can inspect both ends.

Model a cube by shaping six flat equal square faces or joining six equal panels around an empty space; keep all faces square. Contrast with a stretched rectangular box. A premade cube held up by a child is not child construction.

Guided handoff: "Now try a different example. Show what you did." Record the child's action and reasoning separately from what was already modeled.

TEACHER SCRIPT | WARM-UP

Warm-up in short sessions

Bank: M01-M04 and O01-O04. Allocation: 4 choice + 4 performance. Suggested total opportunity: 8 minutes, split into brief turns as needed.

Start with O01; use M01 only as an optional discussion check. Return to other cards across days. Never administer every bank item in one sitting.

0-2 min: invite noticing

"Look at these materials. What do you notice? You can point or tell me." Offer handling time.

2-5 min: try the first performance

Read the card exactly. Let each child show an initial idea before adding geometry words.

5-8 min: connect and record

"Show a part that helped you decide." Record baseline action; stop before fatigue.

Listen/look for: the child creates the model, closes flat boundaries, and makes the defining solid features. Track building and drawing separately.

If stuck: offer large materials and model one closed boundary or one solid feature; then give fresh materials and a new attempt.

Early finish: make a different size and point to the same defining features. Record the item, action, explanation, support and next step.

TEACHER SCRIPT | I DO

I Do in short sessions

Bank: M05-M08 and O05-O08. Allocation: 4 choice + 4 performance. Suggested total opportunity: 12 minutes, split into brief turns as needed.

Start with O05; use M05 only as an optional discussion check. Return to other cards across days. Never administer every bank item in one sitting.

0-3 min: show the purpose

"Watch how I check my work." Use the worked model on the preceding page.

3-8 min: think aloud

Trace, build or fit one step at a time. Name the feature that makes the choice useful; include the deliberate error and repair described in the model.

8-12 min: release a fresh example

"Now show your own way on this card." Remove the solved example. Record whether the child transfers the idea.

Listen/look for: the child creates the model, closes flat boundaries, and makes the defining solid features. Track building and drawing separately.

If stuck: offer large materials and model one closed boundary or one solid feature; then give fresh materials and a new attempt.

Early finish: make a different size and point to the same defining features. Record the item, action, explanation, support and next step.

TEACHER SCRIPT | WE DO

We Do in short sessions

Bank: M09-M13 and O09-O13. Allocation: 5 choice + 5 performance. Suggested total opportunity: 15 minutes, split into brief turns as needed.

Start with O09; use M09 only as an optional discussion check. Return to other cards across days. Never administer every bank item in one sitting.

0-3 min: restate the goal

"We will decide together. What could we try first?" Wait for a suggestion.

3-10 min: test suggestions

Ask a child to act, another to check a feature, then switch. Say "How can we check?" rather than giving the answer.

10-15 min: individual turn

Provide a fresh setup for each learner. Ask for one explanation or gesture. Note shared cues separately.

Listen/look for: the child creates the model, closes flat boundaries, and makes the defining solid features. Track building and drawing separately.

If stuck: offer large materials and model one closed boundary or one solid feature; then give fresh materials and a new attempt.

Early finish: make a different size and point to the same defining features. Record the item, action, explanation, support and next step.

TEACHER SCRIPT | COLLABORATIVE PRACTICE

Collaborative practice in short sessions

Bank: M14-M18 and O14-O18. Allocation: 5 choice + 5 performance. Suggested total opportunity: 13 minutes, split into brief turns as needed.

Start with O14; use M14 only as an optional discussion check. Return to other cards across days. Never administer every bank item in one sitting.

0-3 min: assign roles

"One person makes or shows; one person checks and asks a question. Then switch."

3-9 min: partner work

Ask the checker to say "Show me where" or "What is the same?" Keep partners from moving each other's materials.

9-13 min: observe each child

Each learner gets an uncompleted task. Record the actual action, not the group product.

Listen/look for: the child creates the model, closes flat boundaries, and makes the defining solid features. Track building and drawing separately.

If stuck: offer large materials and model one closed boundary or one solid feature; then give fresh materials and a new attempt.

Early finish: make a different size and point to the same defining features. Record the item, action, explanation, support and next step.

TEACHER SCRIPT | INDEPENDENT PRACTICE

Independent practice in short sessions

Bank: M19-M23 and O19-O23. Allocation: 5 choice + 5 performance. Suggested total opportunity: 17 minutes, split into brief turns as needed.

Start with O19; use M19 only as an optional discussion check. Return to other cards across days. Never administer every bank item in one sitting.

0-3 min: provide access

Read the prompt neutrally. Confirm that the child can reach and handle the materials; do not model the solution.

3-12 min: observe without mathematical cues

Allow silence and time. Ask "Are you ready to show me?" Accept pointing, constructing, drawing or AAC as the task permits.

12-17 min: explain and record

Ask "How did you check?" Photograph only if locally permitted; otherwise sketch the work. Record any support and select a future task.

Listen/look for: the child creates the model, closes flat boundaries, and makes the defining solid features. Track building and drawing separately.

If stuck: offer large materials and model one closed boundary or one solid feature; then give fresh materials and a new attempt.

Early finish: make a different size and point to the same defining features. Record the item, action, explanation, support and next step.

TEACHER SCRIPT | SMALL-GROUP RETEACH

Small-group reteach in short sessions

Bank: M24-M27 and O24-O27. Allocation: 4 choice + 4 performance. Suggested total opportunity: 10 minutes, split into brief turns as needed.

Start with O24; use M24 only as an optional discussion check. Return to other cards across days. Never administer every bank item in one sitting.

0-2 min: locate one difficulty

Use the last recorded action to choose one feature or move; do not reteach based only on a wrong choice letter.

2-7 min: contrast and try

Use the misconception response below. Model once, invite a guided attempt, then change the example.

7-10 min: fresh check

Give an uncompleted card. Record the new action and whether support remains needed.

Listen/look for: the child creates the model, closes flat boundaries, and makes the defining solid features. Track building and drawing separately.

If stuck: offer large materials and model one closed boundary or one solid feature; then give fresh materials and a new attempt.

Early finish: make a different size and point to the same defining features. Record the item, action, explanation, support and next step.

TEACHER SCRIPT | EXIT TICKET

Exit ticket in short sessions

Bank: M28-M30 and O28-O30. Allocation: 3 choice + 3 performance. Suggested total opportunity: 5 minutes, split into brief turns as needed.

Start with O28; use M28 only as an optional discussion check. Return to other cards across days. Never administer every bank item in one sitting.

0-1 min: one clear invitation

Read one performance prompt; no need to complete all three cards.

1-4 min: individual demonstration

Watch the child compare, construct or compose. Ask one neutral "Show how you know" question.

4-5 min: document next step

Keep the exact response, support and next opportunity. Do not turn a brief exit into a mastery cutoff.

Listen/look for: the child creates the model, closes flat boundaries, and makes the defining solid features. Track building and drawing separately.

If stuck: offer large materials and model one closed boundary or one solid feature; then give fresh materials and a new attempt.

Early finish: make a different size and point to the same defining features. Record the item, action, explanation, support and next step.

REUSABLE STUDENT ORGANIZER

My geometry work

Show your idea here.

Adult record: What did the child make, compare or join?

REUSABLE STUDENT ORGANIZER

Show and check

My built model / my drawing
Show matching parts.

I checked by: pointing / touching / tracing / turning / moving

WARM-UP | CHOICE BANK

M01 | Listen and choose

Adult reads every option neutrally. Point, say, sign or use AAC.

Build a triangle outline. Which pieces help?

- A. 4 curved arcs.
- B. 2 straight strips.
- C. 1 round loop.
- D. 3 straight strips.

No writing is required. Use the separate teacher evidence record.

WARM-UP | CHOICE BANK

M02 | Listen and choose

Adult reads every option neutrally. Point, say, sign or use AAC.

Draw a circle. Which line helps?

- A. Two separate lines.
- B. A zigzag with corners.
- C. An open straight line.
- D. A closed curved line.

No writing is required. Use the separate teacher evidence record.

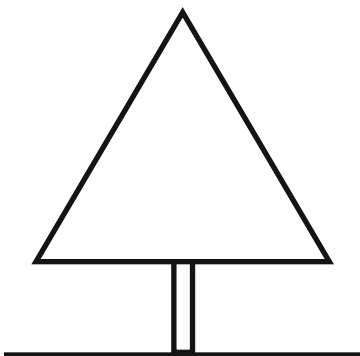
WARM-UP | PERFORMANCE BANK

001 | Show your thinking

Build a triangle to model a triangular sign. Show how your model matches.

Build on your table or tray. Use this space for drawing when asked.

Adult: record the actual action on the evidence form. Preparation and examples are in the teacher-only key.

**Object to model: a roadside sign.**

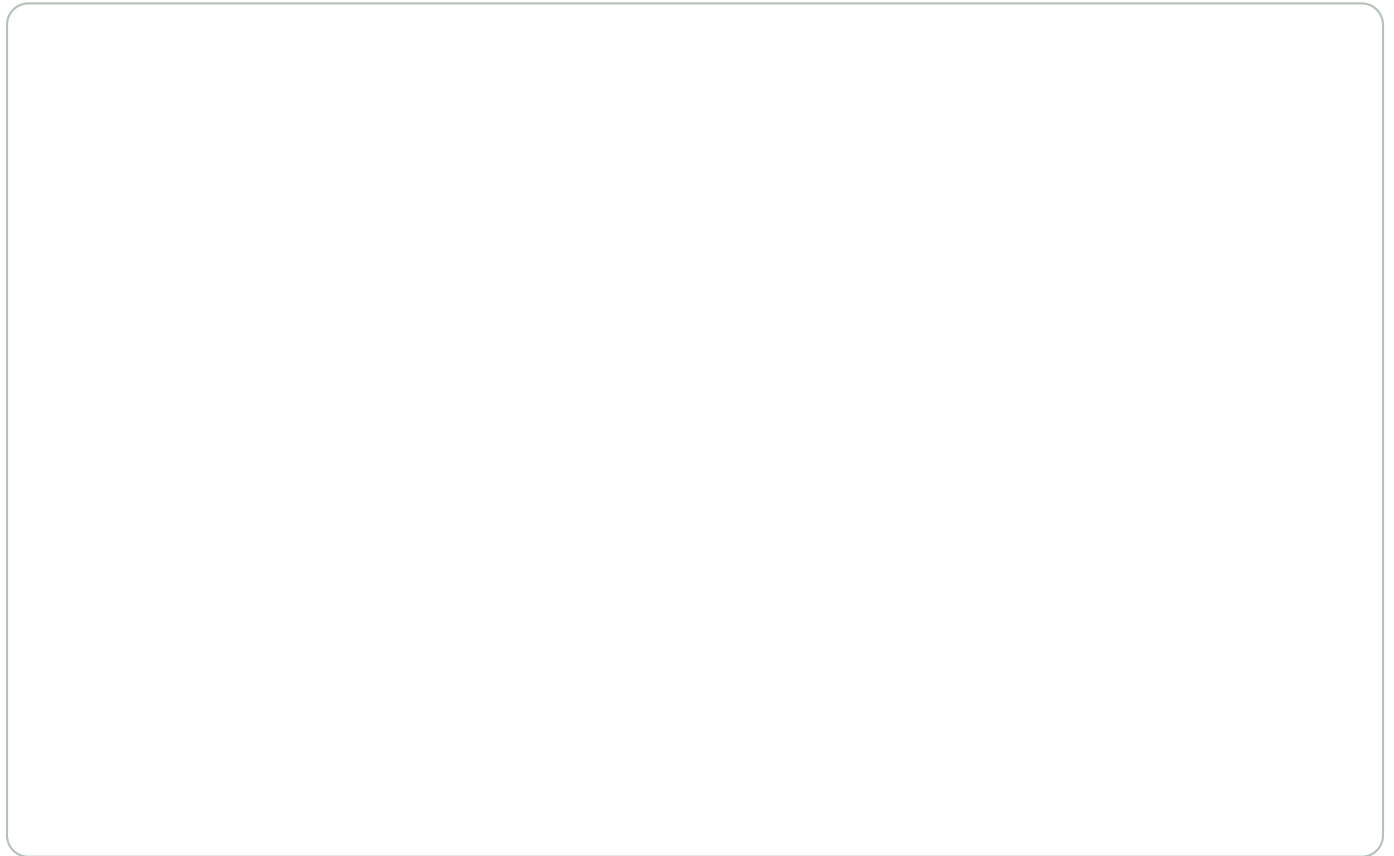
Use strips or other safe materials. Build your own model on the table and explain which parts match. The response space above stays open.

WARM-UP | PERFORMANCE BANK

002 | Show your thinking

Draw a triangle to model a triangular sign. Show how your model matches.

Build on your table or tray. Use this space for drawing when asked.



Adult: record the actual action on the evidence form. Preparation and examples are in the teacher-only key.

TEACHER-ONLY CHOICE KEY

M01-M02 | Answers and reasoning**M01 | D. 3 straight strips.**

Build a triangle outline. Which pieces help?

Why: Join three straight strips end to end to close a triangle.

Other choices: 4 curved arcs.; 2 straight strips.; 1 round loop.

Diagnostic use: ask the child to show the named feature or test the move with materials. A wrong answer may reflect language or access; use the paired performance before deciding the next lesson.

M02 | D. A closed curved line.

Draw a circle. Which line helps?

Why: A circle is closed and round, without corners.

Other choices: Two separate lines.; A zigzag with corners.; An open straight line.

Diagnostic use: ask the child to show the named feature or test the move with materials. A wrong answer may reflect language or access; use the paired performance before deciding the next lesson.

Choice record: 1 = keyed choice; 0 = accessible observed incorrect choice; N/O = unobserved or inaccessible. No inference of construction/composition mastery.

TEACHER-ONLY PERFORMANCE KEY

001-002 | Preparation and examples

001 | build triangle

Prepare: Use large blunt strips and reusable tack or thick non-toxic dough ropes for building; use a broad crayon for drawing. Show a real object or describe its outline neutrally. Do not supply a finished shape to copy during observation.

Expected / example: Child joins materials into a closed triangle with 3 straight sides and 3 corners. Approximate hand-made lines are acceptable if the intended attributes are clear. Child points from the object boundary to matching model features.

Record the actual individual action and support. Use the dimension-specific rubric; valid alternatives are welcome when they meet the same mathematical requirements.

002 | draw triangle

Prepare: Use large blunt strips and reusable tack or thick non-toxic dough ropes for building; use a broad crayon for drawing. Show a real object or describe its outline neutrally. Do not supply a finished shape to copy during observation.

Expected / example: Child draws a closed triangle with 3 straight sides and 3 corners. Approximate hand-made lines are acceptable if the intended attributes are clear. Child points from the object boundary to matching model features.

Record the actual individual action and support. Use the dimension-specific rubric; valid alternatives are welcome when they meet the same mathematical requirements.