

Describe One Object



Kindergarten | Measurement and Data

NC.K.MD.1

A reusable multi-session bank: detailed teacher scripts, original diagrams, manipulatives and organizers, 30 choice tasks, 30 open performances, individual evidence records and complete worked keys.

Select short sessions across days. This is not a 60-item test or an 80-minute seatwork assignment. Adult read-aloud and accessible responses are included.

Aligned to the current NC standard as reproduced in the official 2025 Kindergarten Quick Reference Guide. The 2026 revision for 2028-29 implementation is outside this packet.

Free sample | Contents

NC.K.MD.1 | Kindergarten mathematics

This sample contains 20 complete selected pages from the 103-page resource, plus this sample contents page. Original printed page numbers are retained. Gaps are intentional.

Included original pages: 1-16, 45-46, 77, 87

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) 2, 45-46, 77, 87

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

Start here

Print only selected student cards and reusable mats. Keep teacher setup cards, model explanations and keys out of student view when collecting independent evidence. Choice questions can be read aloud; reading skill is not assessed.

Navigation

Cover; exact standard and targets; preparation and access; worked model; selected-core schedule; seven teacher scripts; reusable organizer; choice bank M01-M30; performance bank O01-O30; evidence records; worked keys; inquiry and source notes. Each task has a stable ID.

Use the bank across sessions

Teach one model or pair of prompts at a time. Stop when attention or access prevents useful evidence. The section times describe an 80-minute instructional sequence distributed across at least four days. The remaining bank is for retrieval, centers, conferences and reteaching; it is not required daily work.

Coverage map

I can name and show a measurable attribute.

I can describe more than one measurable attribute of the same object.

I can explain what my descriptions refer to.

Naming measurable attributes: M01-M30. Several attributes of the same object: O01-O30, with confirmation that two words are not merely synonyms.

TEACHER GUIDE

Standard and learning targets

NC.K.MD.1

Describe measurable attributes of objects; and describe several different measurable attributes of a single object.

Daily I Can targets

Session 1: I can name and show a measurable attribute.

Session 2: I can describe more than one measurable attribute of the same object.

Session 3: I can explain what my descriptions refer to.

Session 4: I can revisit a model, check it, and explain a revision.

Essential question

How many different measurable things can we describe about one object?

Collect observable evidence

Observe: the child identifies a measurable property, shows what it refers to, and describes several distinct measurable properties of a single object. Record the exact words/gestures; do not infer knowledge from vocabulary repetition.

Mathematical practices: use objects and drawings to model; explain and critique a claim with evidence; attend to the meaning of quantities and attributes. These practices are integrated, not extra content standards.

TEACHER GUIDE

Prepare and make it accessible

Materials

Safe familiar boxes, books, cups, open containers, blocks and classroom objects; empty/full containers for exploration; picture and attribute cards; response mat. No numerical measuring tool is necessary.

Prior learning

Attend to a single object and describe a property. Distinguish an object from a description of it. Everyday words such as tall and heavy are useful starting points.

Language

attribute, measurable, length, width, height, weight, capacity (how much a container can hold). Color and ownership can describe an object, but are not the measurable-attribute target here.

Access without changing the target

Read directions neutrally, repeat once, offer object exploration and familiar vocabulary, and permit pointing, signing, AAC, drawing, construction or dictated explanations. A partner may handle materials at the learner's direction; record who made mathematical decisions. Use large high-contrast materials or tactile equivalents. Do not score handwriting, spelling, accent, motor speed or reading.

Record access supports separately from mathematical prompts. If a learner cannot access the materials or no valid opportunity occurred, record N/O. If a learner makes an observable incorrect mathematical response, record that response rather than converting it to N/O.

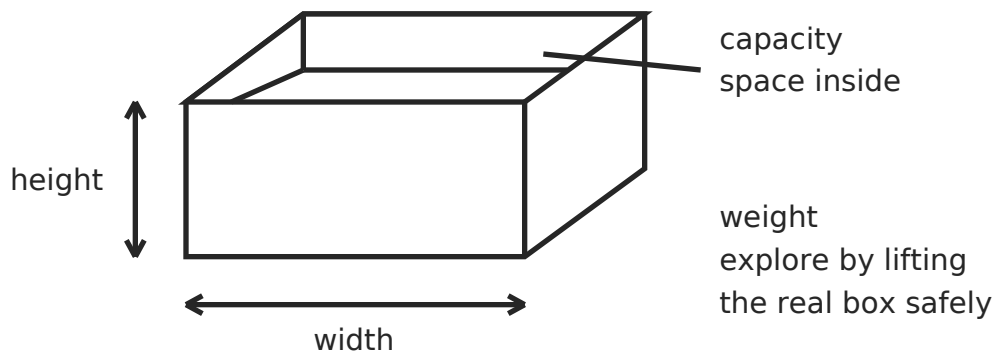
Safety: use age-appropriate objects, supervise cutting and transfers, avoid heavy/sharp objects and small-item hazards.

TEACHER GUIDE

Worked teacher model

Hold one empty open box. Say: "This ONE box has several things I can describe. I can show its height from bottom to top." Trace that direction. "I can show its width from this side to this side." Trace the other direction. Lift safely: "It has weight: how heavy it is." Point inside: "It also has capacity: how much can fit inside." Record four drawings around one central box. Do not invent numerical measurements or assume that a larger-looking box must be heavier.

Illustration only; explore a real object.



Respond to misconceptions

If a child gives color and owner, accept these as descriptions, then redirect: "Show something about how long, tall, heavy, wide, or how much it holds." If the child describes different objects, place one object on the mat and keep it there while adding a second attribute. If tall and height are counted as two attributes, explain that both refer to the same measurable feature.

Illustrations use relative geometry only. No drawing is a ruler or a claim of a printed inch/centimeter length. Weight and capacity require physical evidence, not visual size.

TEACHER GUIDE

A short core across days

Day 1: Warm-up (8 min) and I Do (12 min). Day 2: We Do (15 min) and collaborative practice (13 min). Day 3: independent practice (17 min) and exit ticket (5 min). Day 4 or later: small-group reteach (10 min) based on evidence. Pause or split any session for developmental needs.

Selected core and complete bank

Warm-up: core M01 and O01; bank M01-M04 and O01-O04. 4 choice + 4 performance tasks; 8 minutes for the selected core, not all bank cards.

I Do: core M05 and O05; bank M05-M08 and O05-O08. 4 choice + 4 performance tasks; 12 minutes for the selected core, not all bank cards.

We Do: core M09 and O09; bank M09-M13 and O09-O13. 5 choice + 5 performance tasks; 15 minutes for the selected core, not all bank cards.

Collaborative practice: core M14 and O14; bank M14-M18 and O14-O18. 5 choice + 5 performance tasks; 13 minutes for the selected core, not all bank cards.

Independent practice: core M19 and O19; bank M19-M23 and O19-O23. 5 choice + 5 performance tasks; 17 minutes for the selected core, not all bank cards.

Small-group reteach: core M24 and O24; bank M24-M27 and O24-O27. 4 choice + 4 performance tasks; 10 minutes for the selected core, not all bank cards.

Exit ticket: core M28 and O28; bank M28-M30 and O28-O30. 3 choice + 3 performance tasks; 5 minutes for the selected core, not all bank cards.

Choice work is a conversation starter. For independent evidence, use an unused open task and withhold mathematical hints until after recording the first response. Choose a different bank card when a child has just seen the worked answer.

TEACHER GUIDE

Warm-up | teach and notice

Purpose: activate the target and notice starting ideas.

Core: M01 / O01. Optional bank through M04 / O04.

0-2 min: Invite exploration of the materials. Say: "Show me what you notice that could help with our math today."

2-5 min: Read the core choice exactly; ask each child to point privately before sharing. Say: "Show the part that helped you decide."

5-8 min: Offer the core performance. Record the initial strategy; do not finish the mathematics for the child.

Listen/look for

Observe: the child identifies a measurable property, shows what it refers to, and describes several distinct measurable properties of a single object. Record the exact words/gestures; do not infer knowledge from vocabulary repetition.

Prompt and extend

Neutral access prompt: "You can show it with these materials." After recording evidence, use the misconception response above. Early finishers test whether changing arrangement, orientation, or an irrelevant feature changes their conclusion; explain with the same target attribute or quantity. Record the claim and test, not speed.

Record: item ID, date, first action/words, self-correction, access supports, mathematical cues, and next teaching move.

TEACHER GUIDE

I Do | teach and notice

Purpose: make the reasoning visible with a fully worked model.

Core: M05 / O05. Optional bank through M08 / O08.

0-3 min: Prepare the worked teacher model from the model page. Say: "Watch the decisions I make, not just the answer."

3-8 min: Hold one empty open box. Say: "This ONE box has several things I can describe. I can show its height from bottom to top." Trace that direction. "I can show its width from this side to this side." Trace the other direction. Lift safely: "It has weight: how heavy it is." Point inside: "It also has capacity: how much can fit inside." Record four drawings around one central box. Do not invent numerical measurements or assume that a larger-looking box must be heavier.

8-12 min: Read the core choice and explain the complete keyed reasoning. Invite a child to repeat one decision with materials. Use the core open task as a supported demonstration, not independent assessment.

Listen/look for

Observe: the child identifies a measurable property, shows what it refers to, and describes several distinct measurable properties of a single object. Record the exact words/gestures; do not infer knowledge from vocabulary repetition.

Prompt and extend

Neutral access prompt: "You can show it with these materials." After recording evidence, use the misconception response above. Early finishers test whether changing arrangement, orientation, or an irrelevant feature changes their conclusion; explain with the same target attribute or quantity. Record the claim and test, not speed.

Record: item ID, date, first action/words, self-correction, access supports, mathematical cues, and next teaching move.

TEACHER GUIDE

We Do | teach and notice

Purpose: share the decisions, then release one step.

Core: M09 / O09. Optional bank through M13 / O13.

0-3 min: Revisit the model without giving its solution. Say: "Which step should we do first, and why?"

3-9 min: Read the core choice; test each proposed answer using objects or diagram evidence. Ask: "What would we need to change if that were true?"

9-15 min: Work the core open task together. Pause before each decision and let individuals indicate a next move. Then ask one child to explain the whole result.

Listen/look for

Observe: the child identifies a measurable property, shows what it refers to, and describes several distinct measurable properties of a single object. Record the exact words/gestures; do not infer knowledge from vocabulary repetition.

Prompt and extend

Neutral access prompt: "You can show it with these materials." After recording evidence, use the misconception response above. Early finishers test whether changing arrangement, orientation, or an irrelevant feature changes their conclusion; explain with the same target attribute or quantity. Record the claim and test, not speed.

Record: item ID, date, first action/words, self-correction, access supports, mathematical cues, and next teaching move.

TEACHER GUIDE

Collaborative practice | teach and notice

Purpose: compare methods while retaining individual evidence.

Core: M14 / O14. Optional bank through M18 / O18.

0-2 min: Assign maker and checker roles. Say: "Both people must show their own thinking."

2-8 min: Use the core open task. The maker acts; the checker reconstructs or verifies, then roles switch with the next bank task.

8-13 min: Read the core choice after the performances. Each child explains independently. Record distinct observations; do not give both children the same evidence rating automatically.

Listen/look for

Observe: the child identifies a measurable property, shows what it refers to, and describes several distinct measurable properties of a single object. Record the exact words/gestures; do not infer knowledge from vocabulary repetition.

Prompt and extend

Neutral access prompt: "You can show it with these materials." After recording evidence, use the misconception response above. Early finishers test whether changing arrangement, orientation, or an irrelevant feature changes their conclusion; explain with the same target attribute or quantity. Record the claim and test, not speed.

Record: item ID, date, first action/words, self-correction, access supports, mathematical cues, and next teaching move.

TEACHER GUIDE

Independent practice | teach and notice

Purpose: observe a new demonstration without mathematical coaching.

Core: M19 / O19. Optional bank through M23 / O23.

0-3 min: Provide only access supports and neutral directions. Say: "Show your own way. You may talk, point, build, or draw."

3-12 min: Observe the core open task, then offer one unused bank card if more evidence is needed. Record the first response and any self-correction.

12-17 min: Use the core choice as a secondary check. Ask "How did you decide?" without supplying the target vocabulary or method. Save the model or take teacher notes.

Listen/look for

Observe: the child identifies a measurable property, shows what it refers to, and describes several distinct measurable properties of a single object. Record the exact words/gestures; do not infer knowledge from vocabulary repetition.

Prompt and extend

Neutral access prompt: "You can show it with these materials." After recording evidence, use the misconception response above. Early finishers test whether changing arrangement, orientation, or an irrelevant feature changes their conclusion; explain with the same target attribute or quantity. Record the claim and test, not speed.

Record: item ID, date, first action/words, self-correction, access supports, mathematical cues, and next teaching move.

TEACHER GUIDE

Small-group reteach | teach and notice

Purpose: respond to a specific observed misconception.

Core: M24 / O24. Optional bank through M27 / O27.

0-2 min: Choose a misconception from the observed record, not a total score.

2-6 min: If a child gives color and owner, accept these as descriptions, then redirect: "Show something about how long, tall, heavy, wide, or how much it holds." If the child describes different objects, place one object on the mat and keep it there while adding a second attribute. If tall and height are counted as two attributes, explain that both refer to the same measurable feature.

6-10 min: Try the core open task with reduced support. Say: "Show what you changed and why." Compare the new evidence with the earlier response; record remaining support.

Listen/look for

Observe: the child identifies a measurable property, shows what it refers to, and describes several distinct measurable properties of a single object. Record the exact words/gestures; do not infer knowledge from vocabulary repetition.

Prompt and extend

Neutral access prompt: "You can show it with these materials." After recording evidence, use the misconception response above. Early finishers test whether changing arrangement, orientation, or an irrelevant feature changes their conclusion; explain with the same target attribute or quantity. Record the claim and test, not speed.

Record: item ID, date, first action/words, self-correction, access supports, mathematical cues, and next teaching move.

TEACHER GUIDE

Exit ticket | teach and notice

Purpose: capture a brief individual demonstration and plan the next session.

Core: M28 / O28. Optional bank through M30 / O30.

0-1 min: Read the short core task and make materials accessible.

1-4 min: Collect an individual open demonstration; use the choice only if time permits.

Say: "Show the evidence for your answer."

4-5 min: Record the mathematical evidence, access and next step. If time prevented an observation, mark N/O and schedule a fresh opportunity.

Listen/look for

Observe: the child identifies a measurable property, shows what it refers to, and describes several distinct measurable properties of a single object. Record the exact words/gestures; do not infer knowledge from vocabulary repetition.

Prompt and extend

Neutral access prompt: "You can show it with these materials." After recording evidence, use the misconception response above. Early finishers test whether changing arrangement, orientation, or an irrelevant feature changes their conclusion; explain with the same target attribute or quantity. Record the claim and test, not speed.

Record: item ID, date, first action/words, self-correction, access supports, mathematical cues, and next teaching move.

STUDENT ORGANIZER

My reusable work mat

My object(s): _____

Attribute: _____

I can show or tell:

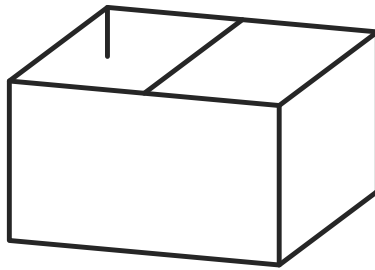
WARM-UP

M01 | Listen and choose

Adult reads aloud. Point, say, sign, or use your usual response.

We describe how long it is for a box. Which attribute is that?

Illustration only; explore a real object.



- A. height
- B. width
- C. length
- D. weight

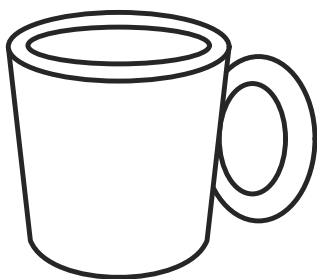
WARM-UP

M02 | Listen and choose

Adult reads aloud. Point, say, sign, or use your usual response.

We describe how tall it is for a cup. Which attribute is that?

Illustration only; explore a real object.



- A. weight
- B. height
- C. length
- D. capacity

WARM-UP

001 | Show your thinking

Adult: Prepare materials using the teacher-only key for this item.

Explore one box. Describe its length and weight. Show what each description refers to. Add another measurable attribute if you can.

Use real materials. Draw, dictate, or explain your evidence.



Name: _____ Date: _____

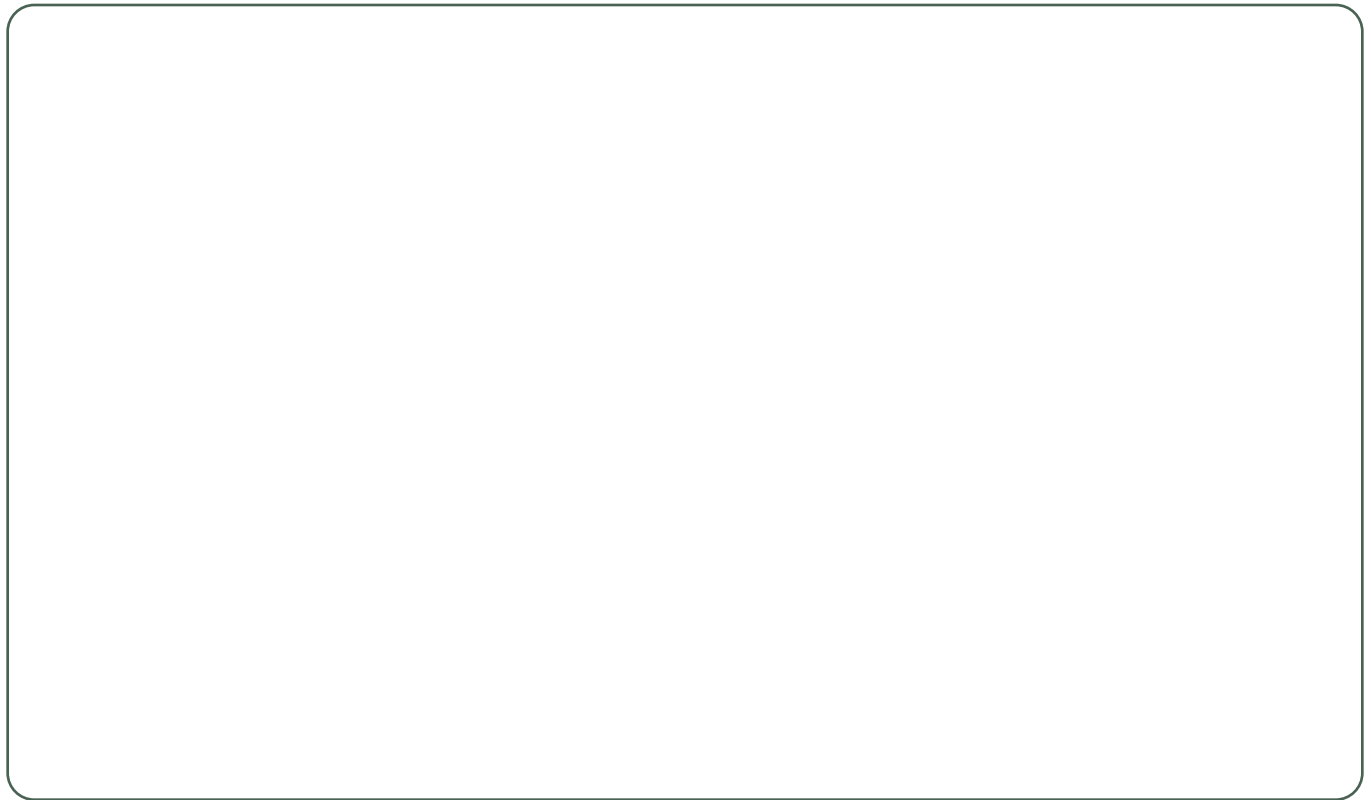
WARM-UP

002 | Show your thinking

Adult: Prepare materials using the teacher-only key for this item.

Explore one cup. Describe its length and weight. Show what each description refers to. Add another measurable attribute if you can.

Use real materials. Draw, dictate, or explain your evidence.



Name: _____ Date: _____

TEACHER USE ONLY

Choice keys | M01-M03

M01 - C. length

length names measurable attribute(s). Length is end to end, height bottom to top, width side to side, weight heaviness, and capacity how much a container holds. Color, names, ownership and favorite use do not describe how much of a measurable attribute the object has.

M02 - B. height

height names measurable attribute(s). Length is end to end, height bottom to top, width side to side, weight heaviness, and capacity how much a container holds. Color, names, ownership and favorite use do not describe how much of a measurable attribute the object has.

M03 - C. weight

weight names measurable attribute(s). Length is end to end, height bottom to top, width side to side, weight heaviness, and capacity how much a container holds. Color, names, ownership and favorite use do not describe how much of a measurable attribute the object has.

TEACHER USE ONLY

Performance keys | 001-002

001 - setup and sample evidence

Adult preparation: Provide one safe real box; use a container with an opening for capacity. Keep this SAME object for all descriptions. No ruler or numerical unit is required. Model only the access routine, not the descriptions.

Sample: "This box has a length from this end to this end; it has weight when I lift it. Accept accurate gestures and other appropriate attributes of this same object. Descriptions such as tall/short or heavy/light need the child to indicate the attribute; no fixed real-object size or weight is assumed. Naming two objects instead of two attributes does not complete the task.

Accept equivalent correct models and explanations; record mathematical support separately. Compare the actual demonstration with the target rather than requiring these exact words.

002 - setup and sample evidence

Adult preparation: Provide one safe real cup; use a container with an opening for capacity. Keep this SAME object for all descriptions. No ruler or numerical unit is required. Model only the access routine, not the descriptions.

Sample: "This cup has a length from this end to this end; it has weight when I lift it. Accept accurate gestures and other appropriate attributes of this same object. Descriptions such as tall/short or heavy/light need the child to indicate the attribute; no fixed real-object size or weight is assumed. Naming two objects instead of two attributes does not complete the task.

Accept equivalent correct models and explanations; record mathematical support separately. Compare the actual demonstration with the target rather than requiring these exact words.