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Material Detectives - Foundation

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Ten complete lessons

Teach as ten 60-minute lessons or use the eight-session route on the next page. The separate files are:

Lesson 01: Object or material

Material Detectives – Foundation – Lesson 01 – Presentation.pptx

Lesson 02: Look and feel safely

Material Detectives – Foundation – Lesson 02 – Presentation.pptx

Lesson 03: Group by one property

Material Detectives – Foundation – Lesson 03 – Presentation.pptx

Lesson 04: Questions about water

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Lesson 06: Same test for all

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Lesson 07: Materials at work

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Lesson 08: Design a toy shelter

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Lesson 09: Show your evidence

Material Detectives – Foundation – Lesson 09 – Presentation.pptx

Lesson 10: Our materials museum

Material Detectives – Foundation – Lesson 10 – Presentation.pptx

Eight-session completion route

Each session: 5 min retrieve • 10 min model • 30 min practical work • 10 min conference • 5 min cleanup. Use the listed slides selectively; do not run two entire decks consecutively.

1 — Lesson 01: Object or material. Use Record 1 and Case C1.

2 — Lessons 02 + 03: Describe safe samples, then sort by one observed property. Use Records 2–3 and Cases C3–C4.

3 — Lesson 04: Ask a water-test question and predict. Use Record 4 and Case C5.

4 — Lesson 05: Record actual observations. Use Record 5; compare with the saved predictions.

5 — Lesson 06: Repeat a consistent comparison. Use Record 6 and Case C6.

6 — Lesson 07: Choose a water test for a purpose. Use Record 7 and Case C7.

7 — Lesson 08: Plan and safely test a toy roof. Use Record 8 and Assessment page 1.

8 — Lessons 09 + 10: Explain the choice with evidence, complete the conference and make one learning label/reflection. Use Records 9–10, Assessment page 2, rubric and quiz as time permits. Omit separate museum-display construction.

All essential teaching and practical assessment finish in these eight sessions. Gather observations throughout. Public speaking and making a display are not required.

Science and safe preparation

An object is a thing we use. A material is what it is made from. Different objects can use the same material; one object may use more than one material.

Use observed properties such as smooth/rough and flexible/stiff. Classify using one consistent rule. A prediction describes what might happen; an observation records what actually happens. A useful material choice links its property to a purpose and evidence.

Absorbent means taking water in. Waterproof means resisting water passing through in the tested conditions. These are different properties. Do not teach that every paper, plastic, fabric or foil sample behave identically. A few drops do not prove performance in heavy rain.

Prepare large, clean paper/card/fabric/plastic samples, a large wooden block and adult-prepared smooth folded foil. Label the exact samples. Avoid glass, sharp edges, loose small pieces and unknown materials.

Adult-guided water tests use a shallow tray, small amounts, the same dropper, equal sample size, three drops per sample and the same short observation time. Agree the time before testing (for example 10 seconds). Test flat samples first; use comparable size-roof size, support and position for the roof test.

No tasting, heating or forceful bending. Adults manage water, cutting, assembly and fixings. Clean spills promptly. Keep wet work away from electrical equipment. End with cleanup and handwashing. Check allergies and sensory access. Children may watch an adult instead of touching.

Resources and responsive teaching

Two colour displays support object/material/property language and explaining evidence. Case Cards C1–C8 revisit the same safe samples and investigation stages. Evidence Trail includes complete rules, six-stop board and eight challenge cards.

Learning Records 1–10 move from identification to safe properties, sorting, prediction, observation, consistent comparison, material-purpose choice, toy-roof design, evidence explanation and reflection.

Record 1 has fixed named-object answers. Its red answer page follows immediately. Other records depend on actual classroom samples and observations; there is no single invented result to copy. Teacher evidence criteria are included in each lesson.

Read labels and questions aloud. Offer pictures, gestures, labelled samples, AAC, oral rehearsal, drawing or adult scribing. Record the scientific idea expressed, not writing speed or confidence in speaking to a group.

Keep predictions before the test. Preserve an unexpected outcome and discuss possible sample, amount, timing or support differences. Repeat a comparison when it can answer a useful question.

Use the displays and game after teaching the concepts. Adult-led game turn: choose the matching case, ask the numbered challenge, let each learner point/tell/draw, then invite a partner to say which evidence supports the answer. Rotate facilitator/observer/recorder roles; no speed contest or elimination.

Extension asks for another justified grouping, a second useful property, a test limitation or a next question. It does not require extra hazardous testing.

Lesson 01: Object or material

Purpose

I can name an object and its material.

Preparation

Prepare a paper cup, plastic cup, cloth bag and large wooden block, plus labelled safe material samples. Avoid glass and small pieces. Read named object labels aloud so children do not have to infer an unknown material from a drawing.

Safe equipment and handling

Use large safe samples and objects.

Handle them gently.

Look and touch only: do not taste.

Ask an adult about an unknown sample.

Support and access

Offer two labelled choices and verbal rehearsal: object / material. Pointing, AAC and adult scribing show the same concept.

Further challenge

Find an object with two materials and explain which part uses each.

Evidence to notice

Record whether the pupil distinguishes the named object from its material; collect one observable question and prediction, without judging the prediction by its eventual accuracy.

Use Learning Record 1, the named lesson deck and relevant case/game prompts. Read the teaching sequence on the next page.

Lesson 01: teaching sequence

0–8 min — Retrieve and notice

Look at a cup. What is it called? What might it be made from?

8–20 min — Explicit model and guided discussion

A cup is an object: a thing we use. A material is what an object is made from. A paper cup is made from paper.

Look at a paper cup and a plastic cup. Both objects are cups. Their materials are different. One object can use more than one material.

20–45 min — Practical investigation

1. Choose a safe object.
2. Name the object.
3. Name or point to its material.
4. Sort the large samples by material.

Record during the practical task

Use Learning Record 1. Match the named objects and materials. Tell, point, draw or ask an adult to scribe. Ask: Will this sample bend? Predict first.

45–55 min — Reflect and explain

Is a cup a material? Explain. A cup is an object. It may be made from paper, plastic or metal. Show a material in our sample collection.

55–60 min — Reflect and clean up

I noticed an object called _____. It is made from _____. One question I want to test is _____.

Adults support safe cleanup. Keep the learner evidence for the next lesson.

Lesson 02: Look and feel safely

Purpose

I can describe a material using property words.

Preparation

Prepare fabric, card, paper, smooth plastic sheet and folded-edge foil. Check allergy/sensory needs. Model touch/bend only; avoid tearing or force. Provide picture/property cards for oral choices.

Safe equipment and handling

Use large, clean, dry samples.

Fold foil edges before use.

Touch gently; bend only with adult guidance.

Never taste, heat or break samples.

Support and access

Adult demonstrates; child watches, points or uses AAC. Offer smooth/rough or bends/does not bend as two choices.

Further challenge

Describe two properties of the same sample and distinguish observation from a guess.

Evidence to notice

Collect a property word linked to a specific safe observation. Note the handling action and the question raised by the pupil.

Use Learning Record 2, the named lesson deck and relevant case/game prompts. Read the teaching sequence on the next page.

Lesson 02: teaching sequence

0–8 min — Retrieve and notice

Name one material from our collection. How could we find out more about it? Which actions are safe?

8–20 min — Explicit model and guided discussion

A property describes a material. Smooth and rough describe a surface. Flexible materials can bend. A stiff sample does not bend easily.

Watch a gentle touch and bend. Describe what you actually notice. One sample can have several properties. People use observations and questions to learn.

20–45 min — Practical investigation

1. Look at one safe sample.
2. Touch it if that feels comfortable.
3. Try an agreed gentle bend.
4. Tell a partner one property you noticed.

Record during the practical talk

Use Learning Record 2 for two samples. Draw or describe the surface and bend. An adult can handle a sample for you. Record the actual observation.

45–55 min — Check and explain

Show a sample and describe its property. What action helped you notice it? A colour is visible, but does it tell us whether the sample bends?

55–60 min — Reflect and clean up

Our sample felt _____. When we gently bent it, _____. We used safe observations to learn.

Adults support safe cleanup. Keep the learner evidence for the next lesson.

Lesson 03: Group by one property

Purpose

I can sort samples using one property rule.

Preparation

Reuse lesson 2 samples. Provide two large sorting spaces and an uncertain/recheck space. For a different rule, use a safe texture grouping with the same concept of consistent classification.

Safe equipment and handling

Use the same safe large samples.

Agree on a gentle bend before starting.

Do not force, snap or tear a sample.

Ask for adult handling when needed.

Support and access

Start with two contrasting actual samples and a pictured rule. Scribe the pupil's reason without supplying.

Further challenge

Resort by a different observable property and explain a changed grouping.

Evidence to notice

Observe consistent application of one rule and a sample-specific reason; accept genuine exceptions and rechecks.

Use Learning Record 3, the named lesson deck and relevant case/game prompts. Read the teaching sequence on the next page.

Lesson 03: teaching sequence

0–8 min — Retrieve and notice

Which samples did we describe yesterday? What does flexible mean? Show a safe way to check.

8–20 min — Explicit model and guided discussion

Our rule is: bends easily / does not bend easily. Test each safe sample gently. Put it in the group that matches the rule. Keep the same rule for every sample. Watch an adult check a sample. Say why it belongs in that group. An uncertain result can go aside to recheck. Use evidence, not the sample's colour.

20–45 min — Practical investigation

1. Choose one property rule.
2. Check each sample safely.
3. Make two groups.
4. Explain one choice to your partner.

Record during the practical task

Use Learning Record 3 to label or colour samples in the two groups. Tell an adult why each group fits. You can sort real samples without writing.

45–55 min — Check and explain

Does every sample follow our rule? What observation supports your choice? If you choose a new rule, sort again and explain why a sample moved.

55–60 min — Reflect and clean up

Our sorting rule was _____. This sample belongs here because _____. We checked the same property each time.

Adults support safe cleanup. Keep the learner evidence for the next lesson.

Lesson 04: Questions about water

Purpose

I can make a prediction and compare it with an observation.

Preparation

Set matching sample areas on waterproof trays; adult doses three small drops each. Use paper and a second actual safe sample. Check water/slip hazards and allow enough time to observe. Never promise a predetermined outcome.

Safe equipment and handling

Use two large samples in a tray.

An adult manages water and droppers.

Use three small drops on each sample.

Wipe spills and keep the floor dry.

Support and access

Show before/after symbols and some oral responses. Offer observational language such as soaked / stayed on top, while accepting other actual behaviour.

Further challenge

Explain why a surprising result deserves recording and suggest a new question.

Evidence to notice

Collect the prediction before testing, a safe observation afterwards and a comparison between them.

Use Learning Record 4, the named lesson deck and relevant case/game prompts. Read the teaching sequence on the next page.

Lesson 04: teaching sequence

0–8 min — Retrieve and notice

What could we ask about water and a sample? What do you think will happen? A prediction tells what we think before a test.

8–20 min — Explicit model and guided discussion

Question: What will water do on this paper? Prediction: I think _____. Watch the adult place a few drops. Observation: I actually saw _____.

Our prediction may match the result. It may be different from the result. Both help us learn. Test the actual samples; do not guess the answer.

20–45 min — Practical investigation

1. Name two samples.
2. Predict before using water.
3. Watch three drops on each.
4. Describe what actually happened.

Record during the practical task

Use Learning Record 4 to keep prediction and observation separate. Draw, point or tell an adult. A different result is useful evidence.

45–55 min — Check and explain

Which sentence was your prediction? Which sentence describes what happened? Did they match? What new question could we ask?

55–60 min — Reflect and clean up

I thought _____. I actually noticed _____. My prediction and observation _____.

Adults support safe cleanup. Keep the learner evidence for the next lesson.

Lesson 05: Record what happens

Purpose

I can record what I actually see in a material test.

Preparation

Use prior observations where still visible or repeat only when needed. Prepare blank labelled records and a clearly marked illustrative drawing for modelling; do not label it measured classroom data.

Safe equipment and handling

Use two labelled large samples and a tray.

An adult manages small water drops.

Use the same method for both.

Wipe spills and wash hands after handling.

Support and access

Accept a drawing, chosen symbol, spoken description or AAC. Adult repeats the pupil's actual words rather than correcting them to a textbook result.

Further challenge

Compare another observation, notice a simple pattern and state that the pattern refers to the samples tested.

Evidence to notice

Collect a labelled, truthful observation record and one comparison/pattern statement.

Use Learning Record 5, the named lesson deck and relevant case/game prompts. Read the teaching sequence on the next page.

Lesson 05: teaching sequence

0–8 min — Retrieve and notice

What did we see when we used water? How could we help someone remember? A record shows our observations.

8–20 min — Explicit model and guided discussion

Watch an adult draw an actual result. Show water staying on top or soaking in only when that happened in this test. Name the sample beside the drawing.

Compare two records of the same test. Which one shows what happened clearly? A supplied example is an illustration, not a result from our classroom.

20–45 min — Practical investigation

1. Name each sample.
2. Watch the agreed water test.
3. Draw or describe what happens.
4. Compare the two observations.

Record during the practical task

Use Learning Record 5 to draw what you saw for Sample A and B. An adult can write your words. Keep any unexpected result in the record.

45–55 min — Check and explain

Can a partner understand your record? What is the same or different? What pattern did you notice in these samples? Do not claim every material behaves this way.

55–60 min — Reflect and clean up

My record shows _____. These two samples _____. One thing I still want to find out is _____.

Adults support safe cleanup. Keep the learner evidence for the next lesson.

Lesson 06: Same test for each

Purpose

I can keep a comparison consistent.

Preparation

Pre-cut equal-sized large samples; select an agreed area and three similar small drops from one dropper. Set a common observation interval, such as an adult-counted 20 seconds, and use it for both. Timing is a method, not a promise about drying or absorption.

Safe equipment and handling

Use matching areas on two safe samples.

Place both in a tray.

Adult uses the same dropper and three drops.

Wipe spills; never taste or heat materials.

Support and access

Use a pictured three-drop rule and adult-supported demonstration. Ask the child to point to one controlled drop.

Further challenge

Explain how changing the water amount could make the comparison harder to interpret; propose a consistent repeat.

Evidence to notice

Observe guided safe participation and an explanation of at least one consistent comparison feature.

Use Learning Record 6, the named lesson deck and relevant case/game prompts. Read the teaching sequence on the next page.

Lesson 06: teaching sequence

0–8 min — Retrieve and notice

We want to compare two materials. Would one drop on A and lots on B help us compare them? Explain.

8–20 min — Explicit model and guided discussion

Use matching sample areas. Use three similar small drops on each. Watch for the same amount of time. Change the material, not the other steps.

Show what will stay the same. Name what we are comparing. This helps us understand the result. An adult guides every water test.

20–45 min — Practical investigation

1. Plan the same steps for both.
2. Predict, then make the guided test.
3. Record the actual result for each.
4. Check whether the steps stayed the same.

Record during the practical task

Use Learning Record 6 to record both samples and the shared test. Draw or tell the two observations. Say or write what you kept the same.

45–55 min — Check and explain

How many drops did each sample get? Were the sample areas similar? Did we observe for the same time? What would we improve next time?

55–60 min — Reflect and clean up

We compared _____. We kept _____ the same. Our observations showed _____. Adults support safe cleanup. Keep the learner evidence for the next lesson.

Lesson 07: Materials at work

Purpose

I can choose a material for a purpose using evidence.

Preparation

Use the class's actual records to compare towel and roof needs. Discuss soaking up water versus keeping water out, plus fit/flexibility where relevant. If evidence is insufficient, model asking a new question rather than asserting a result.

Safe equipment and handling

Use our records and safe dry samples.

Look at a towel and a model shelter.

If another test is needed, ask an adult.

Keep all water work in a tray.

Support and access

Offer two purpose pictures and replay a real observation. Let the pupil point to evidence and explain a choice.

Further challenge

Identify another property or a limit: a sample that keeps drops out may still tear or be hard to

Evidence to notice

Collect a purpose/property connection, record comparison and observation-based reason; check for a prediction revised after evidence.

Use Learning Record 7, the named lesson deck and relevant case/game prompts. Read the teaching sequence on the next page.

Lesson 07: teaching sequence

0–8 min — Retrieve and notice

A towel and a shelter roof do different jobs. What does a towel need to do? What does a roof need to do?

8–20 min — Explicit model and guided discussion

An absorbent sample soaks up water. That can help a towel dry a spill. A roof needs to keep water out. Use our sample tests to help choose.

Absorbent and waterproof mean different things. Check what our actual samples did. People ask questions and use observations to solve everyday problems.

20–45 min — Practical investigation

1. Choose a job: towel or shelter roof.
2. Say the property that job needs.
3. Choose a tested sample.
4. Explain the observation behind your choice.

Record during the practical task

Use Learning Record 7 to record a choice for each job. Compare it with your first prediction. If results differ from the observation.

45–55 min — Check and explain

Why does your material suit this job? Which actual test supports your reason? What might limit this choice? We cannot assume all fabrics or plastics match.

55–60 min — Reflect and clean up

For a _____, I chose _____. It needs to _____. Our observation showed _____.

Adults support safe cleanup. Keep the learner evidence for the next lesson.

Lesson 08: Design a toy shelter

Purpose

I can use test evidence to plan a shelter roof.

Preparation

Prepare stable model bases and large toys; adults handle tape/fixing and any cutting. Use classroom test evidence to select a roof, rather than prescribing one material. Retain planning and observation records for the final conference.

Safe equipment and handling

Use a large toy and a stable shelter base.

Adult helps with safe fixing and assembly.

No sharp edges, small loose parts or heating.

Any water check stays in a tray.

Support and access

Offer a ready-built base, two safe tested roof choices and adult fixing. Assess material reasoning rather than building skill.

Further challenge

Consider two useful properties and one constraint, then revise the design without changing unsupported facts.

Evidence to notice

Gather a chosen material, useful tested property and observation-linked reason; do not score colour preference or craft neatness.

Use Learning Record 8, the named lesson deck and relevant case/game prompts. Read the teaching sequence on the next page.

Lesson 08: teaching sequence

0–8 min — Retrieve and notice

How could we keep a toy dry? Which observations could help? A favourite colour alone is not test evidence.

8–20 min — Explicit model and guided discussion

Look at our test records. Choose a sample that suits the roof's job. Explain the observed property. Check that the roof can fit and stay in place.

Model a small roof with adult help. Point to the sample and the evidence. Explain a possible limit. A model shelter is not a full-size building.

20–45 min — Practical investigation

1. Sketch or describe a roof idea.
2. Choose a sample using evidence.
3. Fit the roof with adult support.
4. Save your record for the explanation.

Record during the practical task

Use Learning Record 8 to draw the plan and label the roof material. Tell which observation helped your choice. Keep the test record with your design.

45–55 min — Check and explain

What material did you choose? What property makes it useful? Which observation supports that idea? What would you improve?

55–60 min — Reflect and clean up

Our roof uses _____. I chose it because our test showed _____. One thing I would improve is _____.

Adults support safe cleanup. Keep the learner evidence for the next lesson.

Lesson 09: Show your evidence

Purpose

I can explain my choice and demonstrate a safe test.

Preparation

Collect existing records and schedules for brief pairs/small groups. Do not retest solely for display. Use practical observations plus a short conference/recording so all pupils demonstrate the complete assessment, with equivalent AAC/drawn/scribed modes.

Safe equipment and handling

Have the shelter, samples and records ready.

Adult supports the safe property test.

Use trays and small water amounts.

A drawing, AAC or adult-scribed explanation works.

Support and access

Provide sentence frames and an adult audience. Communication aids do not reduce achievement when the child supplies the reasoning.

Further challenge

Transfer the reasoning to a towel or flexible hinge and identify a material limitation.

Evidence to notice

Assess object/material understanding, safe consistent testing, truthful recording, prediction comparison, application and communication; combine this with cumulative inquiry evidence.

Use Learning Record 9, the named lesson deck and relevant case/game prompts. Read the teaching sequence on the next page.

Lesson 09: teaching sequence

0–8 min — Retrieve and notice

Look at your roof plan and test record. What did you predict? What did you actually observe?

8–20 min — Explicit model and guided discussion

Use this explanation frame: I chose _____ for the roof. Our test showed _____. That helps the roof because _____.

Demonstrate the agreed test with an adult. Compare your prediction and observation. Explain one step kept the same. Show evidence even if the result surprised you.

20–45 min — Practical investigation

1. Name your object and its material.
2. Show the relevant observation.
3. Demonstrate or explain the safe test.
4. Explain your roof choice and the limit.

Record during the practical task

Use Learning Record and the assessment pages. Share with a partner or an adult. The teacher also uses earlier lesson evidence. Public speaking is not required.

45–55 min — Check and explain

Why does the material suit a roof? How did you make the test consistent? How did the observation compare with your idea? Would the same material suit a towel? Why?

55–60 min — Reflect and clean up

My choice is supported by _____. One thing I kept the same was _____. My thinking changed or stayed the same because _____.

Adults support safe cleanup. Keep the learner evidence for the next lesson.

Lesson 10: Our materials museum

Purpose

I can share what an observation helped me learn.

Preparation

Full route: arrange a simple materials museum using existing sample labels and records. Compact route: complete a sample label and changed-idea statement within session 8; omit assembling a separate exhibition. No essential criterion depends on the display.

Safe equipment and handling

Use safe dry samples and existing records.

Large labels can be drawn or scribed.

No new test is needed just for display.

Share in a way that feels comfortable.

Support and access

Use one sample and a new label; adult attaches it. Allow a quiet partner exchange and recorded response.

Further challenge

Explain a remaining question or limit and how a new observation might change the idea again.

Evidence to notice

Collect evidence-based communication and reflection; explicitly connect people's questions/observations with learning about everyday materials.

Use Learning Record 10, the named lesson deck and relevant case/game prompts. Read the teaching sequence on the next page.

Lesson 10: teaching sequence

0–8 min — Retrieve and notice

What question did we ask? Which observation helped us learn? Scientists can change an idea after evidence.

8–20 min — Explicit model and guided discussion

Make a label for a tested sample. Name its material and an observed property.

Explain what you first thought. Then explain what the test helped you learn.

Use this frame: At first I thought _____. Our test showed _____. Now I think _____ because _____.

20–45 min — Practical investigation

1. Choose one tested sample.
2. Make a clear learning label.
3. Attach or show the matching record.
4. Ask a partner a respectful question.

Record during the practical talk

Use Learning Record 1. Draw, speak, point or use AAC. Keep examples separate from actual results. A changed idea is useful scientific thinking.

45–55 min — Check and explain

Does the label match our actual record? What question or observation helped you learn? What could someone test next? Do not claim every sample will behave the same.

55–60 min — Reflect and clean up

I learned _____ from _____. One idea I changed was _____. One new question is _____.

Adults support safe cleanup. Keep the learner evidence for the next lesson.

Practical assessment and evidence

Use the two-page A Toy Shelter assessment during Lessons 08–09 (sessions 7–8 in the compact route). Review earlier records and observed investigations as well as the finished explanation.

The learner chooses a safe material, identifies a useful property, asks/predicts about a property test, helps to follow consistent safe steps, records an actual observation and explains how that evidence supports the roof choice. A changed choice can show learning.

Adults handle assembly and water. Test labelled roof samples over a small toy-shelter support in a tray, with equal areas, equal drops, the same position and observation time. Keep the teddy aside during testing; use a dry paper witness under each roof. Record whether water reaches it. Do not turn a few-drop result into a universal waterproof claim.

Conference prompts: What is your material? What do you predict? What actually happened? What stayed the same? Which property helps the roof? What evidence supports your choice? What might you change or test next?

Judge the four rubric dimensions separately: Understanding; Evidence and process; Explanation; Reflection. Use of L, AA and demonstrated, drawn or scribed evidence equally. Adult physical handling for safety is expected and does not lower a conceptual rating.

Sound evidence names a material/property, contributes to a safe observable question and prediction, notices a consistent step, records the actual outcome and explains a useful material choice. Transfer adds a justified comparison, limitation or next test. Developing identifies a specific next teaching need.

For the hinge transfer prompt, discuss folded card as a simple toy hinge. A metal hinge moves at its joint; the metal itself does not need to bend. Transfer is additional evidence, not required for the Sound level.

The ten-question quiz checks ideas and misconceptions. It supplements the practical evidence and does not replace the assessment.

Quiz guidance: I-5

1. Is a cup a material?

Expected idea: No. A cup is an object. It may be made from paper, plastic or metal. An object can include more than one material.

2. Why might fabric suit a towel better than a roof?

Expected idea: Absorbency helps a towel soak up water. A roof needs to keep water out. Test the actual samples before choosing. Not every fabric behaves the same way.

3. A sample bends easily. Which property did we notice?

Expected idea: It is flexible in our gentle bend test. We observed a dropping of this sample. Do not force or snap a sample to test it.

4. Which comes before the test: a prediction or an observation?

Expected idea: A prediction comes before the test. An observation tells what we actually noticed. A result that differs from a prediction is useful.

5. A gets one drop. B gets three drops. How could we improve the comparison?

Expected idea: Use the same number of similar small drops. Use matching sample areas and observation time. An adult guides both tests safely.

Accept an equivalent scientifically accurate explanation. Read aloud; let learners point, demonstrate, draw or use AAC. Use wrong answers to identify a specific reteaching need.

Quiz guidance: 6-10

6. Your result surprises you. What should you put in the record?

Expected idea: Record what actually happened. Keep the sample name with the observation. Compare the result with your prediction. Do not change it to match a supplied example.

7. How do people use questions and observations to choose a material?

Expected idea: They ask what the material needs to do. They observe or test relevant properties. They use the evidence to help choose. They can ask a new question if evidence is limited.

8. Is a sample waterproof just because it soaks up water?

Expected idea: No. Absorbent means it soaks up water. Waterproof means it keeps water out. Those properties are different. Use a test suited to the job.

9. Illustrative result: A soaks up drops. B keeps drops on top. Which would you try for a spill? Why?

Expected idea: A is a reasonable choice for this example because it soaked up the drops. This is illustrative information, not class data. Check the actual sample's suitability and safety.

10. Your roof keeps drops out but tears when fitted. What could you do next?

Expected idea: Consider another tested sample or safe support. A roof also needs to fit and stay in place. Ask an adult and test the revised choice safely. Keeping a few drops out does not prove every use.

Accept an equivalent scientifically accurate explanation. Read aloud; let learners point, demonstrate, draw or use AAC. Use wrong answers to identify a specific reteaching need.



Material Detectives



Object

A thing we use.



cup

Material

What an object is made from.



paper



plastic



metal

Property

How a material looks, feels or behaves.



Flexible

Can bend easily.



Absorbent

Soaks up water.



Waterproof

Keeps water out.



Test the actual samples. Not every sample behaves the same way.



How We Explain Our Evidence

1 Our question

Is a cup a material?



2 Our evidence

These cups are made from paper, plastic and metal.



paper



plastic



metal

3 Our explanation

A cup is an object. A material is what it is made from.



Oral frame

I know _____ because _____.

Look closely. Use evidence. Explain your thinking.



Material Case Cards 1-4



C1 Cup or material?



A paper cup is an object made from paper.

Name the object and its material.

C2 A dry paper sample



Look at a large sample.

What could you observe?

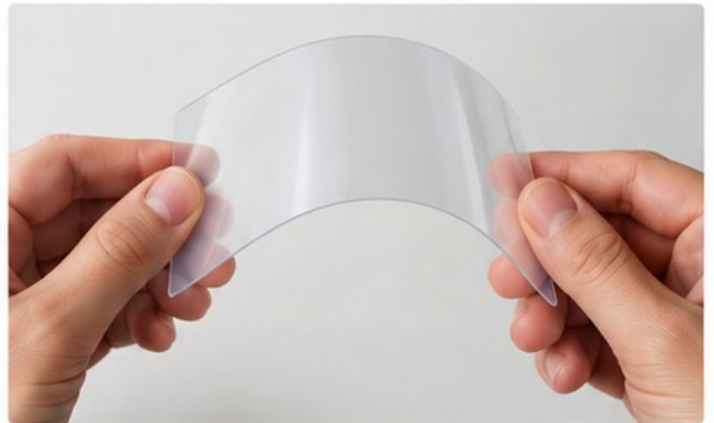
C3 Fabric



Use a gentle touch or watch an adult.

How does this sample feel?

C4 Gentle bending



Do not force or break a sample.

Does this sample bend easily?



Material Case Cards 5-8

Illustrative examples

C5

Before and after

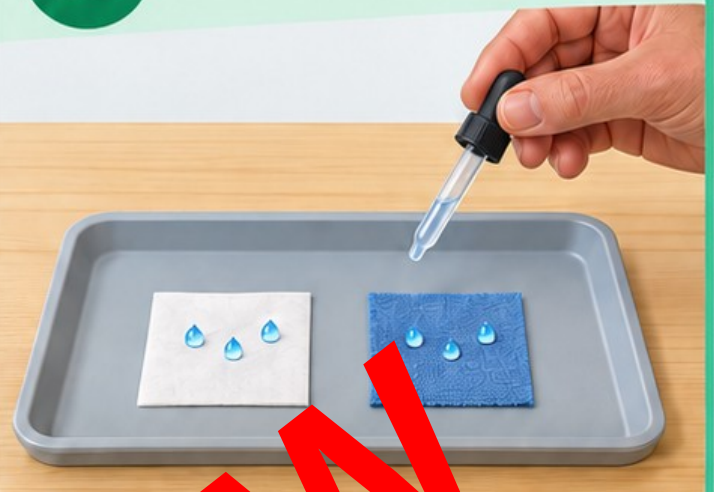


Predict first. Then observe.

Did your idea match the result?

C6

Same test



Keep the drops the same and time the same.

What are you comparing?

C7

Different jobs



A towel soaks up water. A roof keeps it out.

Which property does each job need?

C8

A toy shelter



Use your test record to choose a roof.

Which observation supports your choice?



Evidence Trail



Look
Think
Share
Be kind

2-4 players • Take turns • No race

How to play

- 1 Choose a challenge card.



- 2 Point to a stop on the trail.



- 3 Share an idea and its evidence.



- 4 Ask one respectful question.



- 5 Check with the teacher.



- 6 Move to the next stop.



Worked turn

Card 1: Name an object and its material.



A paper cup is an object made from paper.



I can point, draw, speak or use AAC.



point



draw



speak



AAC



Use a large counter or point.
You can work with a partner.



Evidence Trail

Use careful observations and evidence to answer a question.
Follow the trail from 1 to 6.

Think
Look
Discuss
Find evidence

What
can we
find out?



Start

1. Notice

Look closely at the object
or material. What do you notice?



I notice ...

2. Ask

What question could you
investigate? Be curious!



Our question is ...

3. Compare

Test and compare materials.
Keep it fair.



What did you see? How were the materials
the same or different?

I see ...

4. Explain

Use your evidence to
explain what you found.

Material	Our observation
Sample A	
Sample B	

My explanation is ...

5. Apply

Use what you found to
solve a problem.

Design a shelter to
keep a toy dry. Which
material will you choose?
Why?



I will choose ... because ...

6. Reflect

What did you learn?
How could you find out more?

I learned ...

Next time I could ...

I can use
evidence to
make a claim.

Finish

Share evidence. Ask kindly. Check with the teacher.



Evidence Trail — Challenge Cards



1.

C1: Name an object and its material.



2.

C3-C4: Describe a safe observation.



3.

C4: Sort using one property rule.



4.

C5: Compare prediction and observation.



Before	After

5.

C6: What should stay the same?



6.

C7: Which property does a towel need?



7.

C8: Use evidence to choose a roof.



8.

C8: What might you change or test next?





Tell, point, draw or use AAC.

Name: _____

Date: _____

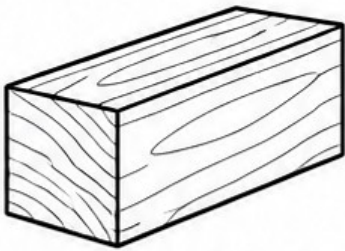
1. Object or Material

Match each named object to its material.



paper cup

fabric



wooden block

paper



cloth bag

wood

Is a cup a material? Tell or draw.

An adult can write your words.

Name: _____

ANSWERS

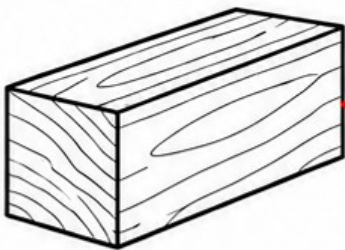
Date: _____

1. Object or Material

Match each named object to its material.



paper cup



wooden block



cloth bag

fabric

paper

wood

PREVIEW

Is a cup a material? Tell or draw.

No. A cup is an object. A material is what it is made from.

An adult can write your words.

Name: _____

Date: _____

2. Look and Feel Safely

Describe two safe samples. You can watch an adult.



Sample A: _____

Surface: _____

Gentle bend: _____

Sample B: _____

Surface: _____

Gentle bend: _____

Words you can use: _____ smooth • rough • flexible • stiff

One safe action I used

Tell, point, draw or ask an adult to scribe.

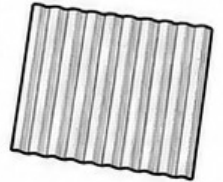
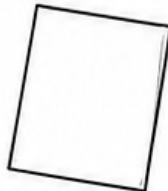
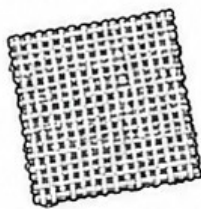
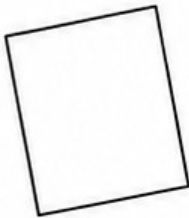
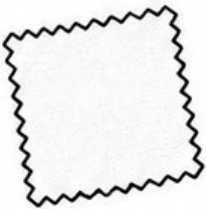
Name: _____

Date: _____

3. Group by One Property

Use one rule. Check every sample safely.

Our property rule: _____



Group 1: _____

Group 2: _____

PREVIEW

This sample belongs here because...

You may explain your groups aloud.

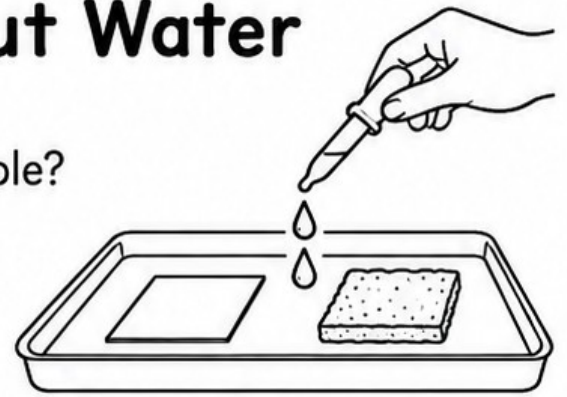
Name: _____

Date: _____

4. Questions About Water

What will three small drops do on each sample?

An adult guides the test in a tray.



Sample A: _____

Before: my prediction

After: my observation

Did my prediction match? Tell or draw.

Sample B: _____

Before: my prediction

After: my observation

Did my prediction match? Tell or draw.

Name: _____

Date: _____

5. Record What Happens

Record what you actually noticed.

Sample A: _____

I noticed: _____

Sample B: _____

I noticed: _____

What was the same or different?

Water may soak in, stay on top, or behave another way.
Unexpected results belong in our record.

Name: _____

Date: _____

6. Same Test for Each

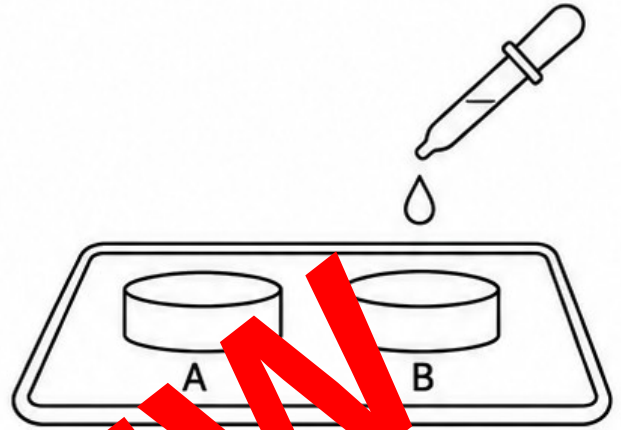
We compare the materials. We keep other steps the same.

Sample A: _____

Sample B: _____

Drops on each: _____

Same observation time: _____



What happened on A?

What happened on B?

One thing we kept the same: _____

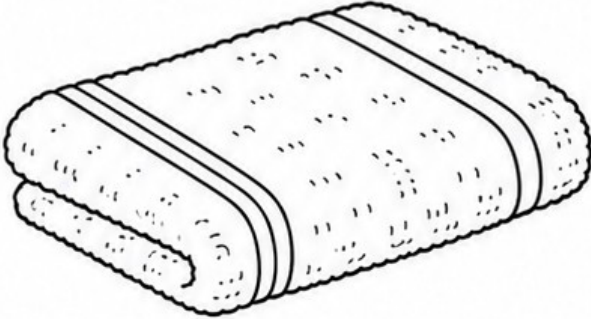
Adult-guided test. Record the actual results.

Name: _____

Date: _____

7. Materials at Work

Choose using our actual observations.



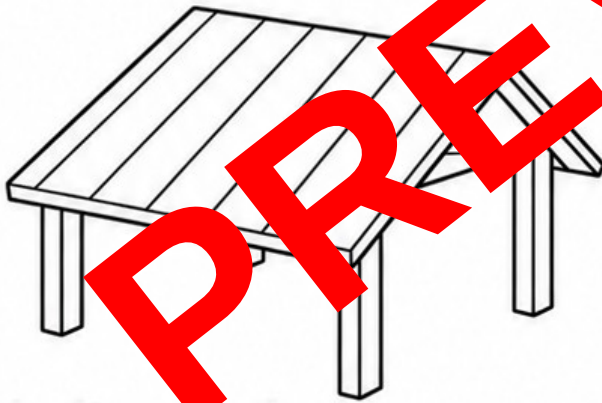
Draw your sample here:

A towel

It needs to: _____

My sample choice: _____

Our evidence: _____



Draw your sample here:

A shelter roof

It needs to: _____

My sample choice: _____

Our evidence: _____

One limit or question: _____

Absorbent and waterproof are different. Test the samples.

Name: _____

Date: _____

8. Design a Toy Shelter



Use evidence to choose a roof.

My roof plan

PREVIEW

Roof material: _____

Useful property: _____

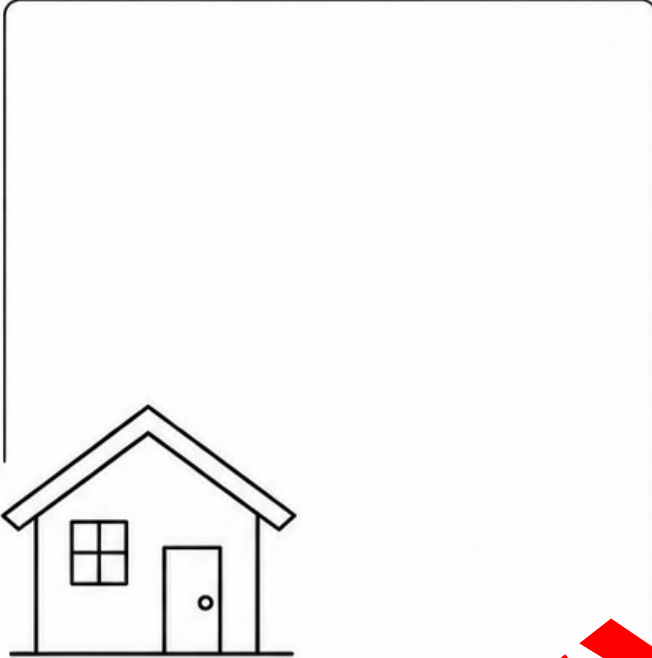
Our observation showed: _____

An adult helps with safe fixing. Colour alone is not test evidence.

Name: _____ Date: _____

9. Show Your Evidence

I chose _____ for the roof.



Our test showed...



I first predicted: _____

I actually observed: _____



It suits the roof because...



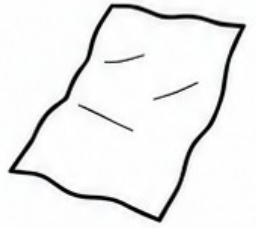
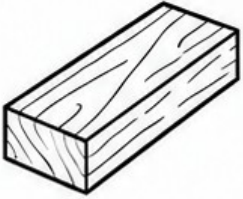
One thing we kept the same: _____

Tell, demonstrate, draw, use AAC or ask an adult to scribe.

Name: _____ Date: _____

10. Our Materials Museum

Make a learning label for one tested sample.



Material: _____

Observed property: _____

At first I thought...

Our test showed...

Now I think...

My next question...

Use an actual observation. You may share without making a display.

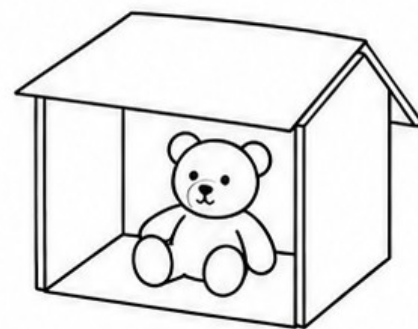
Name: _____

Date: _____

Assessment: A Toy Shelter

Choose a roof material. Show a safe property test.
Explain your choice using an observation.

You may draw, speak, use AAC or ask an adult to scribe.



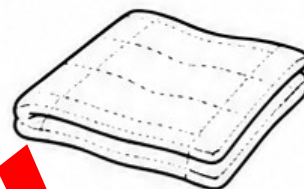
paper



cardboard



foil



fabric

My shelter and roof plan:

My chosen material: _____

The roof needs to: _____

My prediction:

My actual observation:

One test step kept the same: _____

An adult guides assembly and testing. Use small water amounts in a tray.

Name: _____

Date: _____

Assessment: My Explanation

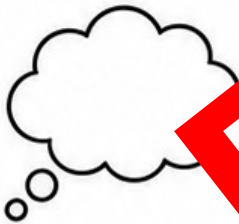
What object and material did you use?



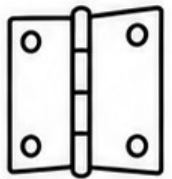
Which observation supports your roof choice?



Did your prediction match? Explain.



Would a nail or hinge work? Why?



Teacher evidence check

- ☐ Object and material
- ☐ Property linked to purpose
- ☐ Question and prediction
- ☐ Safe consistent test
- ☐ Actual record and comparison
- ☐ Prediction compared with result
- ☐ Evidence shared and learning explained

Combine this response with lesson evidence. Communication aids do not lower achievement.

Name: _____

Date: _____

Material Detectives — Rubric

Dimension	Developing	Sound	Transfer
Understanding	Confuses object, material or a useful property.	Names object and material; links a property to the roof.	Applies a property to a new job and states a limit.
Evidence and process	Needs conceptual prompts to connect test and record.	Uses a safe consistent test and records actual observations.	Explains a consistent test and proposes a useful improvement.
Explanation	Gives a choice without observation-based reasoning.	Uses an observation to explain the roof choice.	Justifies a new choice using evidence and a constraint.
Reflection	Needs prompts to change prediction from observation.	Compares prediction and result; shares what was learned.	Explains a changed or supported idea and a new question.

Evidence / next teaching step:

Judge understanding, not handwriting or speaking style.

AAC, drawings and scribing are welcome. Only conceptual support needs inform a lower descriptor.

Material Defectives

Lesson 01

Obiect or material



Our learning

I can name an object and its material.

PREVIEW

Notice and ask

Look at a cup.

What is it called?

What might it be made from?

PREVIEW

Object, material and evidence

A cup is an object: a thing we use.

A material is what an object is made from.

A paper cup is made from paper.

PREVIEW

Watch and discuss

Look at a paper cup and a plastic cup.

Both objects are cups.

Their materials are different.

One object can use more than one material.

PREVIEW

Safe materials and actions

Use large safe samples and objects.

Handle them gently.

Look and touch only: do not taste.

Ask an adult about an unknown sample.

PREVIEW

Our practical task

1. Choose a safe object.
2. Name the object.
3. Name or point to its material.
4. Sort the large samples by material.

PREVIEW

Record your learning

Use Learning Record 1.

Match the named objects and materials

Tell, point, draw or ask an adult to scribe.

Ask: Will this sample bend? Predict first.

PREVIEW

Check and explain

Is a cup a material? Explain.

A cup is an object.

It may be made from paper, plastic or metal.

Show a material in our sample collection.

PREVIEW

What did you learn?

I noticed an object called _____.

It is made from _____.

One question I want to test is _____.

PREVIEW

Well Done!
You used evidence.



Material Defectives
Lesson 02
Look and feel safely



Our learning

I can describe a material using property words.

PREVIEW

Notice and ask

Name one material from our collection.

How could we find out more about it?

Which actions are safe?

PREVIEW

Object, material and evidence

A property describes a material.

Smooth and rough describe a surface.

Flexible materials can bend.

A stiff sample does not bend easily.

PREVIEW

Watch and discuss

Watch a gentle touch and bend.

Describe what you actually notice.

One sample can have several properties.

People use observations and questions to learn.

PREVIEW

Safe materials and actions

Use large, clean, dry samples.

Fold foil edges before use.

Touch gently; bend only with adult guidance.

Never taste, heat or break samples.

PREVIEW

Our practical task

1. Look at one safe sample.
2. Touch it if that feels comfortable.
3. Try an agreed gentle bend.
4. Tell a partner one property you noticed.

PREVIEW

Record your learning

Use Learning Record 2 for two samples.

Draw or describe the surface and bend.

An adult can handle a sample for 90 s.

Record the actual observation.

PREVIEW

Check and explain

Show a sample and describe its property.

What action helped you notice it?

A colour is visible, but does it tell us
whether the sample bends?

PREVIEW

What did you learn?

Our sample felt _____.

When we gently bent it, _____.

We used safe observations to learn.

PREVIEW

Well Done!
You used evidence.



Material Defectives
Lesson 03
Group by one property



Our learning

I can sort samples using one property rule.

PREVIEW

Notice and ask

Which samples did we describe yesterday?

What does flexible mean?

Show a safe way to check.

PREVIEW

Object, material and evidence

Our rule is: bends easily / does not bend easily

Test each safe sample gently.

Put it in the group that matches the rule.

Keep the same rule for every sample.

PREVIEW

Watch and discuss

Watch an adult check a sample.

Say why it belongs in that group.

An uncertain result can go aside to be checked.

Use evidence, not the sample's colour.

PREVIEW

Safe materials and actions

Use the same safe large samples.

Agree on a gentle bend before starting.

Do not force, snap or tear a sample.

Ask for adult handling when needed.

PREVIEW

Our practical task

1. Choose one property rule.
2. Check each sample safely.
3. Make two groups.
4. Explain one choice to your partner.

PREVIEW

Record your learning

Use Learning Record 3.

Label or draw samples in the two groups.

Tell an adult why each group fits.

You can sort real samples without writing.

PREVIEW

Check and explain

Does every sample follow our rule?

What observation supports your choice?

If you choose a new rule, sort again
and explain why a sample moved.

PREVIEW

What did you learn?

Our sorting rule was _____.

This sample belongs here because _____.

We checked the same property each time.

PREVIEW

Well Done!
You used evidence.



Material Detectives
Lesson 04
Questions about water



Our learning

I can make a prediction and compare it with an observation.

PREVIEW

Notice and ask

What could we ask about water and a sample?

What do you think will happen?

A prediction tells what we think before a test.

PREVIEW

Object, material and evidence

Question: What will water do on this paper?

Prediction: I think _____.

Watch the adult place a few drops.

Observation: I actually saw _____

PREVIEW

Watch and discuss

Our prediction may match the result.

It may be different from the result.

Both help us learn.

Test the actual samples; do not guess the answer.

PREVIEW

Safe materials and actions

Use two large samples in a tray.

An adult manages water and droppers.

Use three small drops on each sample.

Wipe spills and keep the floor dry.

PREVIEW

Our practical task

1. Name two samples.
2. Predict before using water.
3. Watch three drops on each.
4. Describe what actually happened.

PREVIEW

Record your learning

Use Learning Record 4.

Keep prediction and observation separate.

Draw, point or tell an adult.

A different result is useful evidence.

PREVIEW

Check and explain

Which sentence was your prediction?

Which sentence describes what happened?

Did they match?

What new question could we ask?

PREVIEW

What did you learn?

I thought _____.

I actually noticed _____.

My prediction and observation _____.

PREVIEW

Well Done!
You used evidence.



Material Defectives
Lesson 05
Record what happens



Our learning

I can record what I actually see in a material test.

PREVIEW

Notice and ask

What did we see when we used water?

How could we help someone remember?

A record shows our observations

PREVIEW

Object, material and evidence

Watch an adult draw an actual result.

Show water staying on top or soaking in

only when that happened in this test.

Name the sample beside the drawing.

PREVIEW

Watch and discuss

Compare two records of the same test.

Which one shows what happened clearly?

A supplied example is an illustration,
not a result from our classroom.

PREVIEW

Safe materials and actions

Use two labelled large samples and a tray.

An adult manages small water drops.

Use the same method for both.

Wipe spills and wash hands after handling.

PREVIEW

Our practical task

1. Name each sample.
2. Watch the agreed water test.
3. Draw or describe what happens.
4. Compare the two observations.

PREVIEW

Record your learning

Use Learning Record 5.

Draw what you saw for Sample A and B.

An adult can write your words.

Keep an unexpected result in the record.

PREVIEW

Check and explain

Can a partner understand your record?

What is the same or different?

What pattern did you notice in these samples?

Do not claim every material behaves this way.

PREVIEW

What did you learn?

My record shows _____.

These two samples _____.

One thing I still want to find out is _____.

PREVIEW

Well Done!
You used evidence.



Material Defectives
Lesson 06
Same test for each



Our learning

I can keep a comparison consistent.

PREVIEW

Notice and ask

We want to compare two materials.

Would one drop on A and lots on B

help us compare them? Explain.

PREVIEW

Object, material and evidence

Use matching sample areas.

Use three similar small drops on each.

Watch for the same amount of time.

Change the material, not the other steps.

PREVIEW

Watch and discuss

Show what will stay the same.

Name what we are comparing.

This helps us understand the result.

An adult guides every water test.

PREVIEW

Safe materials and actions

Use matching areas on two safe samples.

Place both in a tray.

Adult uses the same dropper and time drops.

Wipe spills; never taste or handle materials.

PREVIEW

Our practical task

1. Plan the same steps for both.
2. Predict, then make the guided test.
3. Record the actual result for each.
4. Check whether the steps stayed the same.

PREVIEW

Record your learning

Use Learning Record 6.

Name both samples and the shared test.

Draw or tell the two observations.

Say one thing you kept the same.

PREVIEW

Check and explain

How many drops did each sample get?

Were the sample areas similar?

Did we observe for the same time?

What would we improve next time?

PREVIEW

What did you learn?

We compared _____.

We kept _____ the same.

Our observations showed _____.

PREVIEW

Well Done!
You used evidence.



Material Defectives

Lesson 07

Materials at work



Our learning

I can choose a material for a purpose using evidence.

PREVIEW

Notice and ask

A towel and a shelter roof do different jobs.

What does a towel need to do?

What does a roof need to do?

PREVIEW

Object, material and evidence

An absorbent sample soaks up water.

That can help a towel dry a spill.

A roof needs to keep water out.

Use our sample tests to help choose

PREVIEW

Watch and discuss

Absorbent and waterproof mean different things.

Check what our actual samples did.

People ask questions and use observation

to solve everyday problems

PREVIEW

Safe materials and actions

Use our records and safe dry samples.

Look at a towel and a model shelter.

If another test is needed, ask an adult.

Keep all water work in a tray.

PREVIEW

Our practical task

1. Choose a job: towel or shelter roof.
2. Say the property that job needs.
3. Choose a tested sample.
4. Explain the observation behind your choice.

PREVIEW

Record your learning

Use Learning Record 7.

Record a choice for each job.

Compare it with your first prediction.

If results differ, use the observation.

PREVIEW

Check and explain

Why does your material suit this job?

Which actual test supports your reason?

What might limit this choice?

We cannot assume all fabrics or plastics match.

PREVIEW

What did you learn?

For a _____, I chose _____.

It needs to _____.

Our observation showed _____.

PREVIEW

Well Done!
You used evidence.



Material Defectives
Lesson 08
Design a toy shelter



Our learning

I can use test evidence to plan a shelter roof.

PREVIEW

Notice and ask

How could we keep a toy dry?

Which observations could help?

A favourite colour alone is not test evidence.

PREVIEW

Object, material and evidence

Look at our test records.

Choose a sample that suits the roof's job.

Explain the observed property.

Check that the roof can fit and stay in place.

PREVIEW

Watch and discuss

Model a small roof with adult help.

Point to the sample and the evidence.

Explain a possible limit.

A model shelter is not a full-size building.

PREVIEW

Safe materials and actions

Use a large toy and a stable shelter base.

Adult helps with safe fixing and assembly.

No sharp edges, small loose parts or heating.

Any water check stays in a tray.

PREVIEW

Our practical task

1. Sketch or describe a roof idea.
2. Choose a sample using evidence.
3. Fit the roof with adult support.
4. Save your record for the explanation.

PREVIEW

Record your learning

Use Learning Record 8.

Draw the plan and label the roof materials.

Tell which observation helped your choice.

Keep the test record with your design.

PREVIEW

Check and explain

What material did you choose?

What property makes it useful?

Which observation supports that idea?

What would you improve?

PREVIEW

What did you learn?

Our roof uses _____.

I chose it because our test showed _____.

One thing I would improve is _____.

PREVIEW

Well Done!
You used evidence.



Material Defectives
Lesson 04
Show your evidence



Our learning

I can explain my choice and demonstrate a sample test

PREVIEW

Notice and ask

Look at your roof plan and test record.

What did you predict?

What did you actually observe?

PREVIEW

Object, material and evidence

Use this explanation frame:

I chose _____ for the roof.

Our test showed _____.

That helps the roof because _____.

PREVIEW

Watch and discuss

Demonstrate the agreed test with an adult.

Compare your prediction and observation.

Explain one step kept the same.

Show evidence even if the result surprised you.

PREVIEW

Safe materials and actions

Have the shelter, samples and records ready.

Adult supports the safe property test.

Use trays and small water amounts.

A drawing, AAC or adult-scribed explanation works.

PREVIEW

Our practical task

1. Name your object and its material.
2. Show the relevant observation.
3. Demonstrate or explain the safe use.
4. Explain your roof choice and one limit.

PREVIEW

Record your learning

Use Learning Record 9 and the assessment papers.

Share with a partner or an adult.

The teacher also uses earlier lesson evidence.

Public speaking is not required.

PREVIEW

Check and explain

Why does the material suit a roof?

How did you make the test consistent?

How did the observation compare with your idea?

Would the same material suit a towel? Why?

PREVIEW

What did you learn?

My choice is supported by _____.

One thing I kept the same was _____.

My thinking changed or stayed the same because _____.

PREVIEW

Well Done!
You used evidence.



PREVIEW

Material Defectives

Lesson 10

Our materials museum



Our learning

I can share what an observation helped me learn.

PREVIEW

Notice and ask

What question did we ask?

Which observation helped us learn?

Scientists can change an idea after evidence.

PREVIEW

Object, material and evidence

Make a label for a tested sample.

Name its material and an observed property.

Explain what you first thought.

Then explain what the test helped you learn.

PREVIEW

Watch and discuss

Use this frame:

At first I thought _____.

Our test showed _____.

Now I think _____ because _____.

PREVIEW

Safe materials and actions

Use safe dry samples and existing records.

Large labels can be drawn or scribed.

No new test is needed just for display.

Share in a way that feels comfortable.

PREVIEW

Our practical task

1. Choose one tested sample.
2. Make a clear learning label.
3. Attach or show the matching record.
4. Ask a partner a respectful question.

PREVIEW

Record your learning

Use Learning Record 10.

Draw, speak, point or use AAC.

Keep examples separate from actual results.

A changed idea is useful scientific thinking

PREVIEW

Check and explain

Does the label match our actual record?

What question or observation helped you learn?

What could someone test next?

Do not claim every sample will behave the same.

PREVIEW

What did you learn?

I learned _____ from _____.

One idea I changed was _____.

One new question is _____.

PREVIEW

Well Done!
You used evidence.



Material Detectives Foundation Quiz



How to share your answers

Listen while the teacher reads.

Point, speak, draw or use AAC.

Explain your idea using evidence.

The practical assessment is separate.

PREVIEW

Question 01

Is a cup a material?

PREVIEW

Answer 01

No. A cup is an object.

It may be made from paper, plastic or metal.

An object can include more than one material.

PREVIEW

Question 02

Why might fabric suit a towel better than paper?

PREVIEW

Answer 02

Absorbency helps a towel soak up water.

A roof needs to keep water out.

Test the actual samples before choosing.

Not every fabric behaves the same way.

PREVIEW

Question 03

A sample bends easily. Which property do we notice?

PREVIEW

Answer 03

It is flexible in our gentle bend test.

We observed a property of this sample.

Do not force or snap a sample to test it.

PREVIEW

Question 04

Which comes before the test: a prediction or an observation?

PREVIEW

Answer 04

A prediction comes before the test.

An observation tells what we actually noticed.

A result that differs from a prediction is useful.

PREVIEW

Question 05

A gets one drop. B gets three drops. How could we improve the comparison?

PREVIEW

Answer 05

Use the same number of similar small drops.

Use matching sample areas and observation time.

An adult guides both tests safely.

PREVIEW

Question 06

Your result surprises you. What should you put in the record?

PREVIEW

Answer 06

Record what actually happened.

Keep the sample name with the observation.

Compare the result with your prediction.

Do not change it to match a supplied example.

PREVIEW

Question 07

How do people use questions and observations to choose a material?

PREVIEW

Answer 07

They ask what the material needs to do.

They observe or test relevant properties.

They use the evidence to help choose.

They can ask a new question if evidence is limited.

PREVIEW

Question 08

Is a sample waterproof just because it soaks up water?

PREVIEW

Answer 08

No. Absorbent means it soaks up water.

Waterproof means it keeps water out.

Those properties are different.

Use a test suited to the job.

PREVIEW

Question 09

Illustrative result: A soaks up drops. B keeps drops on top. Which would you try for a spill? Why?

PREVIEW

Answer 09

A is a reasonable choice for this example because it soaked up the drops.

This is illustrative information, not cross data.

Check the actual sample's suitability and safety.

PREVIEW

Question 10

Your roof keeps drops out but tears when it falls. What could you do next?

PREVIEW

Answer 10

Consider another tested sample or safe support.

A roof also needs to fit and stay in place.

Ask an adult and test the revised choice safely.

Keeping a few drops out does not prove every use.

PREVIEW

Reflect on your learning

Which observation helped you learn?

Which idea did you change or support?

What question could you test next?

PREVIEW

Well Done!
Share your evidence.

