

Teacher guide • Classroom activity • Printable worksheets • Assessment

Teacher Overview

A big project can feel overwhelming until we organize its results into smaller pieces. This lesson introduces a kid-friendly Work Breakdown Structure (WBS): a visual map of the things a project must deliver. Students learn to start with the finished outcome, identify major deliverables, and break each into smaller, manageable pieces.

Learning objectives

• Explain why breaking down work makes projects easier to plan.

• Distinguish a deliverable (what we create) from an activity (what we do).

• Create a simple two-level Work Breakdown Structure.

• Check that all important parts of the project are included.

> **Penny says:** “When a project looks too big, we can break it into smaller pieces. Once we can see the pieces, our team can make a plan to put them together!”

Key vocabulary

TERM	MEANING
Deliverable	A result or item the project will create.
Work Breakdown Structure (WBS)	A picture or list showing the project’s results broken into smaller pieces.
Work package	A small, manageable piece of the project that can be planned and assigned.
Scope	What the project includes and does not include.
Decomposition	Breaking a large result into smaller parts.

Lesson Plan: Breaking Down the Work

Duration: 40–45 minutes | **Materials:** paper, sticky notes, markers, worksheet

1. Start with the finished result — 5 minutes

Ask: “If our class builds a reading corner, what must be finished for it to be ready?” Record the results, such as seating, books, signs, and organization.

2. Deliverable or action? — 8 minutes

Compare “book display” (a deliverable) with “shop for books” (an activity). Explain that a WBS focuses on what the team needs to produce, not the order of activities.

3. Build a class WBS — 10 minutes

Put “Class Reading Corner” at the top. Under it, add “Seating,” “Books,” and “Signs.” Under “Signs,” add “Welcome sign” and “Book labels.” Show how each branch becomes more specific.

4. Team WBS challenge — 15 minutes

Teams choose a project from earlier lessons and complete the WBS Builder worksheet. Ask them to name three major deliverables and two smaller pieces for each.

5. Check for missing pieces — 5 minutes

Have another team review the WBS: “Would the project be complete if all these pieces were delivered?” Invite one improvement.

Discussion questions

- How is a WBS different from a schedule?
- What might happen if we forget a deliverable?
- How do we know when a piece is small enough to plan?
- Can two different teams organize the same project in different ways?

> **Duke’s Team Challenge:** Find one important piece that your team almost forgot. Add it to the WBS before you start planning!

Student Worksheet: My WBS Builder

Name: _____ Date: _____

Project: _____

OUR FINISHED RESULT: What will our project create?

_____

Major deliverable 1: _____

Smaller piece A: _____

Smaller piece B: _____

Major deliverable 2: _____

Smaller piece A: _____

Smaller piece B: _____

Major deliverable 3: _____

Smaller piece A: _____

Smaller piece B: _____

WBS CHECK

- ■ We included all major results.
- ■ Each smaller piece belongs to a major deliverable.
- ■ Our WBS describes what we will create, not just what we will do.
- ■ We can explain how the pieces fit together.

Reflection & Quick Assessment

Exit ticket

1. What does WBS stand for?

2. Name one deliverable for a school garden project.

3. Why do we break a large project into smaller pieces?

4. Circle one: I can make a simple WBS. YES / ALMOST / NOT YET

Teacher check for understanding

■ Student identifies a deliverable.

■ Student separates results from activities.

■ Student creates a project-to-deliverables-to-pieces hierarchy.

■ Student checks the WBS for missing work.

Extension activities

STEM: Have teams design a model Mars habitat. Build a WBS of habitat components (structure, power, water, communication) before selecting materials.

Home: Break a family project, such as planting a garden, into three main deliverables and smaller pieces.

Teacher tip: Keep the WBS outcome-oriented. Students can convert the lowest-level pieces into tasks and a schedule after the WBS is complete.

Next resource: Estimating Time and Resources.