

Investigations 3 © 2017 Assessments

Introduction



Hi. In this tutorial, we'll explore assessments in *Investigations 3*.

Opportunities for assessment are carefully woven throughout the curriculum units. We'll look at each piece of the comprehensive assessment system that provides an ongoing, in-depth portrait of each student's understandings and proficiencies.

Assessments are available as either print resources, digital resources on Savvas Realize™, or both.

Benchmarks

realize reader Search Menu

Benchmarks

Benchmark 1: Organize, represent, and describe categorical data, choosing categories that help make sense of the data.

Representing and Interpreting Data (Resource Masters, **A19–A20**) in Session 2.6

Benchmark 2: Make and interpret a bar graph and a pictograph, including use of scales greater than 1.

Assessment Checklist: Interpreting and Making Bar Graphs and Pictographs (Resource Masters, **A13**) Use in Session 1.6, and again in Sessions 1.7 and 1.8.

Quiz 1 (Resource Masters, **A14–A15**) in Session 1.9

Representing and Interpreting Data (Resource Masters, **A19–A20**) in Session 2.6

Benchmark 3: Make a line plot for a set of measurement data, with a scale that includes inches and half inches.

Assessment Checklist: Generating and Plotting Measurement Data and MP4 and MP5 (Resource Masters, **A16**) in Session 2.5

Benchmarks and assessments for each Investigation

Assessments are tied to Unit Benchmarks that set clear expectations for what your students should know and be able to do.

At the beginning of each unit, you'll find a berry-colored section called "Assessment in this Unit." This section lists the benchmarks and locations of different types of assessment in each Investigation of the unit. Assessment opportunities embedded in the curriculum units are also indicated by the berry coloring.

Types of Assessment



Formative assessment

Ongoing

Guides instruction
throughout each unit



Summative assessment

Used to measure how
much a student has
learned at the end of a unit

Investigations 3 offers both formative and summative assessment opportunities. Formative assessments are ongoing and help guide your instruction throughout each unit. Summative assessments are used to measure how much a student has learned over the course of the unit. Both are important components of comprehensive assessment.

Ongoing Assessment: Observing Students at Work

realizereader

Search Menu

Expanded Differentiation Activities

These activities, which take between 15 and 30 minutes, can be done in small groups, pairs, or with individuals. It may be appropriate for some students to complete more than one of the activities within an investigation or unit.

INVESTIGATION 1 1 Modeling with Data

Intervention: **Breakfast Data**
Use after Session 1.2.

Practice: **More Bar Graphs**
Use after Session 1.4.

Extension: **Data Details**
Use after Session 1.2.

INVESTIGATION 2 Collecting, Representing, and Analyzing Measurement Data

Intervention: **Representing and Describing Data**
Use after Session 2.1.

Practice: **More Feet and Inches**
Use after Session 2.3.

Use the information you learn for:

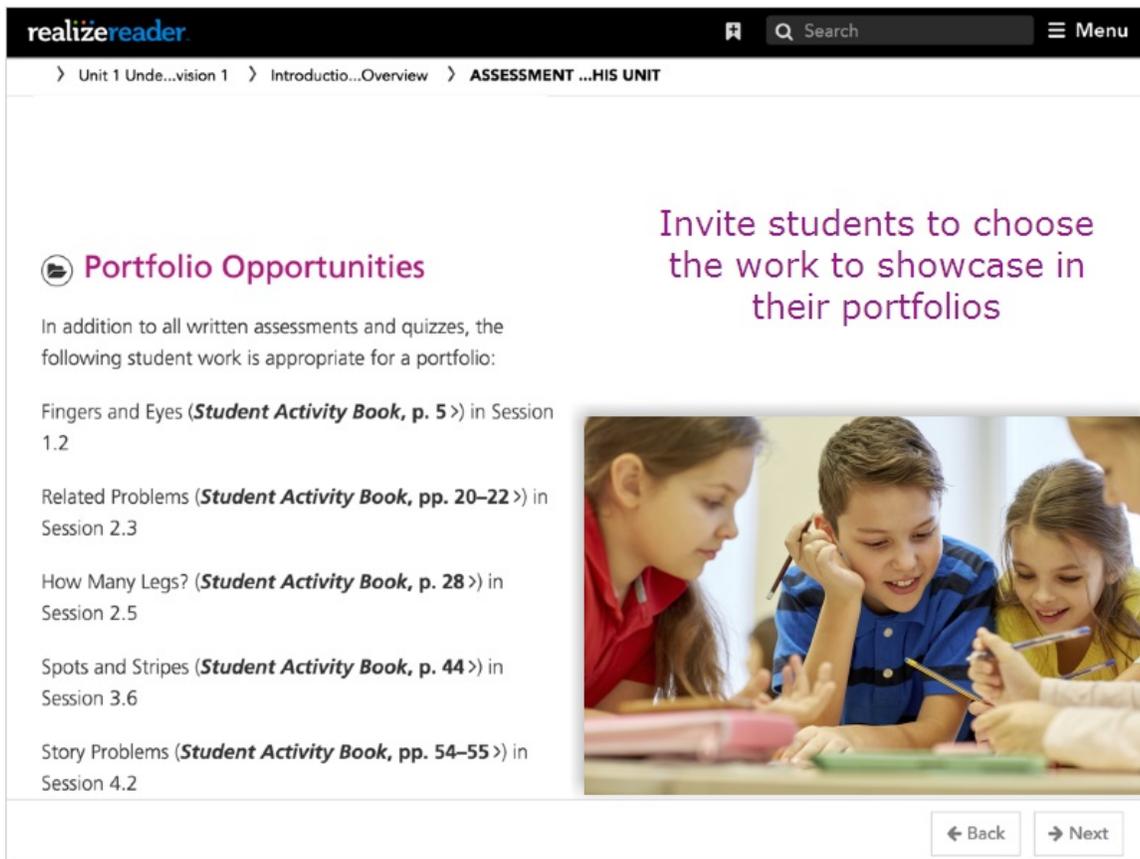
- Differentiation and intervention
- Family conferences
- Student reports

Observing students as they engage in activities and conversation about their ideas is a vital part of assessing not only what students know, but also how they make sense of the mathematics.

Ongoing Assessment: Observing Students at Work is a regular feature of the sessions. It identifies the math focus of the activity and lists questions to consider as you observe your students solving problems, playing math games, and working on activities. It also indicates specific questions that relate to one of the unit's highlighted Standards for Mathematical Practice, using this icon. Because this is an informal assessment, no specific benchmarks are provided for math content.

Use the information you learn during these assessments to inform decisions about differentiation and intervention strategies, preparing for family conferences, or writing student reports.

Portfolio Opportunities



The screenshot shows the Realize Reader interface. At the top, there is a navigation bar with the Realize Reader logo, a search bar, and a menu icon. Below the navigation bar, there are breadcrumb links: > Unit 1 Unde...vision 1 > Introductio...Overview > ASSESSMENT ...HIS UNIT. The main content area features a heading 'Portfolio Opportunities' with a folder icon. To the right of this heading is a purple text box that says 'Invite students to choose the work to showcase in their portfolios'. Below the heading, there is a list of student work items with their corresponding page numbers and session numbers. To the right of the text is a photograph of three students (two girls and one boy) sitting at a desk, looking at a book together. At the bottom right of the content area, there are 'Back' and 'Next' navigation buttons.

Portfolio Opportunities

In addition to all written assessments and quizzes, the following student work is appropriate for a portfolio:

- Fingers and Eyes (*Student Activity Book*, p. 5 >) in Session 1.2
- Related Problems (*Student Activity Book*, pp. 20–22 >) in Session 2.3
- How Many Legs? (*Student Activity Book*, p. 28 >) in Session 2.5
- Spots and Stripes (*Student Activity Book*, p. 44 >) in Session 3.6
- Story Problems (*Student Activity Book*, pp. 54–55 >) in Session 4.2

← Back → Next

Like observation, student work provides another type of formative assessment. Suggestions for particular types of work that could be saved in a portfolio are listed in the *Assessment in this Unit* section. You may also invite students to choose the work they would like to showcase in their portfolios.

Embedded Assessments

The screenshot shows a digital interface for 'realizeReader'. At the top, there is a search bar and a menu icon. The main content area is titled 'Not Meeting the Benchmarks' in green. Below the title, a paragraph explains that students who do not meet benchmarks often have problems representing data correctly and typically report only the frequencies of individual values, as shown in the examples. To the right of the text, the phrase 'Not meeting benchmarks' is written in purple. Two examples of student work are shown in white boxes with blue shadows, representing pieces of paper. The first example, labeled '[Benjamin's Work]', shows a student's handwritten text: 'Most kids, in Mr. Keith's class jumped 34 inches. Only one kid jumped 39 inches. Two kids jumped 30 1/2 inches. Three kids jumped 33 inches. one kid jumped 32 1/2 inches.' The second example shows another student's handwritten text: 'Most, children in mr. Keith's class jumped 34". The fewest jumped 25, 27 1/2, 28 1/2, 32 1/2, 33 1/2, and 39". No children jumped

Embedded assessments in each curriculum unit are written activities that provide insight on students' progress toward the benchmarks. They come in the form of quizzes or assessment activities. We'll take a look at each of these shortly.

A Teacher Note is provided for each embedded assessment. Here you'll find examples of student work and guidelines for assessing whether students are meeting, partially meeting, or not meeting the benchmarks.

Quizzes

The screenshot shows a digital quiz interface. At the top, there is a navigation bar with 'Exit' and 'U6 S1.8 - Assessment: Quiz 1'. Below this is a purple header with the 'INVESTIGATIONS' logo and the tagline 'IN NUMBER, DATA, AND SPACE'. A blue banner reads 'Find quizzes online in PDF format or in your Assessment Sourcebook'. The main content area is titled 'Quiz 1' and includes a 'NAME' and 'DATE' field. The first question asks to draw lines connecting shaded parts of rectangles to unit fractions. The second question is partially visible. A blue callout box on the right lists quiz types: Single-answer, Multiple-answer, and Matching items. A vertical toolbar on the right contains icons for editing, saving, and navigation. At the bottom right, a purple bar shows '1 of 2'.

Quizzes include:

- Single-answer
- Multiple-answer
- Matching items

Quiz 1

1 Draw lines to show which unit fraction represents the shaded part of each rectangle.

2 A large pizza is cut into fourths. Three friends each eat one fourth of the pizza. How much of the pizza did they eat? Mark the correct answer.

< 1 of 2 >

Starting in Grade 1, students take a quiz every 5 to 10 sessions. These are new to *Investigations 3* and serve a dual purpose. First, they provide evidence of students' progress toward meeting the benchmarks. Second, they give students exposure to the types of assessment items they are likely to encounter on Next Generation Assessments. Quizzes include both single-answer and multiple-answer selected-response items, as well as different types of matching items.

You can find quizzes online in PDF format or in your print *Assessment Sourcebook*.

Assessment Activities

The screenshot shows a digital assessment interface. At the top, there is a navigation bar with 'Exit', 'U2.S2.6 - Assessment', and 'ASSESSMENT' (with a checkmark). Below this, the title 'Representing and Interpreting Data' is displayed. The main content area contains 'Problem 1. Jump Distances' and a word problem about Mr. Keith's Grade 3 students. A table of jump distances is provided, and the number 33 is circled in red. Below the table, there are instructions to create a line plot and write a report to Ms. Brown. The interface includes a sidebar on the left with navigation options and a sidebar on the right with a virtual number line and various tool icons. At the bottom, there is a footer with 'UNIT 2 | A.19 | SESSION 2.8' and '© Pearson Education 3'. A page indicator at the bottom right shows '1 of 4'.

NAME _____ DATE _____ (PAGE 1 OF 2)

Representing and Interpreting Data

Problem 1. Jump Distances

On Field Day, Mr. Keith's Grade 3 students recorded the following distances in inches for their standing broad jumps:

33	$33\frac{1}{2}$	32	$30\frac{1}{2}$	31	34
$32\frac{1}{2}$	30	33	26	34	30
34	25	$30\frac{1}{2}$	33	26	$27\frac{1}{2}$
31	39	26	34	$28\frac{1}{2}$	32

On a separate sheet of paper, make a line plot to represent the data.

Write a report to Ms. Brown, the gym teacher, about Mr. Keith's class. Tell her the most important things she should know about their data.

Dear Ms. Brown,

UNIT 2 | A.19 | SESSION 2.8 © Pearson Education 3

1 of 4

Also starting in Grade 1 are embedded assessment activities for which students produce written responses. They require students to solve problems and show, explain, or defend their solution strategies.

Assessment activities can often be completed virtually through Savvas Realize and incorporate virtual manipulatives and annotation tools to help students solve the problems. Alternatively, students can solve them in print.

Tests on Savvas Realize

realize. PROGRAMS CLASSES DATA

Investigations 3 Grade 3 2017

Table of contents Resources Standards eText Tools

UNIT 5 Unit 5 - Cube Patterns, Arrays, and multiple of 10

UNIT 6 Unit 6 - Fair Shares and Fractions on Number Lines

UNIT 7 Unit 7 - How Many Miles? Available exclusively on Pearson Realize

UNIT 8 Unit 8 - Larger Numbers and Multi-Step Problems

✓ Pearson-Created Assessments

Copyright © Pearson Education, Inc. or its affiliates. All Rights Reserved. User Agreement | Privacy Policy | Credits | rev. 06cf52e PEARSON

In addition, a set of formal summative assessments is available for Grades 1 through 5. These are Savvas-created digital assessments with accompanying blackline masters, which are available exclusively on Savvas Realize.

A Beginning-of-the-Year Test will identify a baseline for each student’s mathematical understanding. This will give you an initial picture of the conceptual resources your students are bringing into instruction.

A Unit Test is given at the end of each unit. It measures what your students have learned over the course of the unit. Use the ExamView Assessment Suite as a supplemental resource to build custom tests using the test bank.

An End-of-the-Year Test is provided to measure how much growth each student has made since the beginning of the year.

Assessment Design

Exit Beginning-of-Year Test

Audio support

Listen

Students in the drama club had a car wash to raise money. The numbers of minutes it took to wash cars and trucks are shown in the line plots below.

Washing Cars

Time (in minutes)

Washing Trucks

Time (in minutes)

Drag a number to each box on the right to answer each question.

4 5 6 7 8 9

How many vehicles took exactly $13\frac{1}{2}$ minutes to wash?

How many trucks took more than 14 minutes to wash?

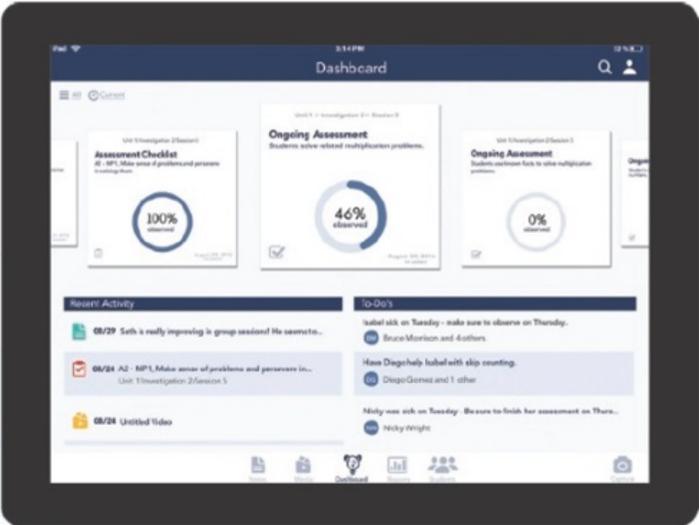
How many cars took $11\frac{1}{2}$ minutes or less to wash?

Review progress Question 27 of 30 Go Back Next

Each assessment is auto-graded, and you can see aggregated data for mastery, progress, and usage on the Data tab for each of your classes. Check out the Savvas Realize tutorials on MySavvasTraining.com to learn more about the data feature. Alternatively, you can access PDF versions of assessments to print out for your students. An answer key is provided to assist you in grading.

Assessments consist of both multiple-choice and free-response items. For students who struggle with reading, an audio option is available so they can listen to the questions and answer choices being read to them.

Managing Assessment Information



Mobile devices allow you to photograph work

SCOUT app enables you to capture:

- Class discussions
- Individual student explanations
- Observational assessment information

It is important to develop a system to record and organize assessment information. You may choose either a digital or non-digital system, depending on your resources and needs.

Mobile devices allow you and your students to photograph work. Mobile apps, such as the SCOUT Observational Assessment App, enable you to capture class discussions, individual student explanations, and observational assessment information.

Non-digital approaches to managing assessment information might include jotting down observations onto a class list or recording individual observations on note cards that can be transferred to individual student files or portfolios.

Assessment Sourcebook



The *Assessment Sourcebook*, which is available as both a printed book and as online PDFs, contains assessment masters for assessment checklists, assessment activities, and quizzes. These and other assessment tools are available on Savvas Realize.

Closing



In this tutorial, we explored the types of assessment in *Investigations 3*. We learned about both formative and summative opportunities to understand students' progress toward benchmarks.

Thank you for joining me for this tutorial!