

## Planning a Three Part Math Lesson: [e-workshop](http://www.eworkshop.on.ca/)<sup>1</sup>

Take time to visit the *Ontario Ministry of Education's e-workshop website* (it is listed in the **PJ Math Favorites**). Regardless on the grade level or topic, this site provides the necessary support in both the content you will teach and the pedagogy (how to teach).

To encourage you to use this resource to support your math lesson planning, I've included a few sample screen shots from the e-workshop *Measurement Model (Grades 4 – 6)*.

The website provides specific examples, including video clips (not closed captioned) to help you plan a math lesson. As you click on each tab (left side of the screen), you will be provided with specific details to guide your planning. For example, in the **TELL ME Tab**, if you would like to know more *Differentiated Instruction* or *Assessment Tasks*, then click on the related link.

The screenshot shows the e-workshop.on.ca website interface. At the top, there is a navigation bar with the logo 'eworkshop.on.ca I get it.' and the text 'ONLINE TEACHING RESOURCE'. The main navigation menu includes 'Home | Sitemap | About This Site | My eWorkshop | Feedback | Help | Français'. Below this, a breadcrumb trail reads 'You are here: Home > Learning Modules > Measurement'. On the right, there is a 'Login to My eWorkshop' link and two circular icons representing a clipboard and a document. The main content area is divided into three tabs: 'OVERVIEW', 'TELL ME' (which is active), and 'SHOW ME'. Under the 'TELL ME' tab, there are three sub-sections: 'Teaching Measurement', 'Attributes, Units, and Measurement Sense', and 'Measurement Relationships'. The 'Teaching Measurement' sub-section is selected, showing a sidebar with a table of contents containing 'Introduction', 'Differentiated Instruction', 'Problem-based Teaching', 'Assessment', and 'Coaching'. The main content area displays the 'Introduction to Teaching Measurement' section, which includes a paragraph about Chris's experience teaching Grade 3 students, a paragraph about the challenges of teaching measurement in the junior grades, and a bulleted list of three focus areas: providing differentiated instruction, engaging in problem-based teaching, and using ongoing assessment.

<sup>1</sup> <http://www.eworkshop.on.ca/>

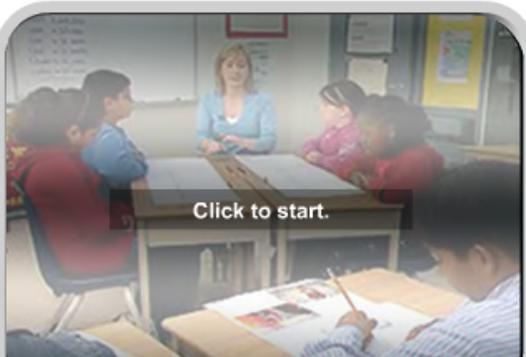
As you design **Three Part Lessons** (*Getting Started – Working on it – Reflecting and Connecting*) go to the **TELL ME Tab** of the website. It is a wonderful resource.

The screenshot shows the eWorkshop.on.ca website interface. At the top, the logo 'eworkshop.on.ca' is displayed with the tagline 'I get it.' and the text 'ONLINE TEACHING RESOURCE'. Navigation links include 'Home | Sitemap | About This Site | My eWorkshop | Feedback | Help | Français'. A breadcrumb trail reads 'You are here: Home > Learning Modules > Measurement'. A 'Login to My eWorkshop' link is also present. The main navigation bar features three tabs: 'OVERVIEW', 'TELL ME' (which is active), and 'SHOW ME'. Below this, there are three sub-sections: 'Teaching Measurement', 'Attributes, Units, and Measurement Sense', and 'Measurement Relationships'. On the left, a vertical sidebar lists various topics: 'Introduction', 'Differentiated Instruction', 'How to Differentiate', 'Problem-based Teaching', 'Problem-solving Phases' (highlighted), 'Assessment', and 'Coaching'. The main content area is titled 'Problem-solving Phases' and contains the following text: 'Teaching through problem solving involves the following phases:' followed by a bulleted list: 'Getting started', 'Working on It', and 'Reflecting and connecting'. Below this, it states: 'The amount of support provided by the teacher during the problem-solving process is based on the needs of the students.' At the bottom of the content area, a light blue box contains a mouse cursor icon and the text 'Click each phase to learn more.' Below this box are three large, rounded rectangular buttons: 'Getting Started' (blue), 'Working on It' (green), and 'Reflecting and Connecting' (red).

As you click on each **Lesson Phase**, you are provided with the details of the activities/actions to include within that phase of the lesson. The screen shot below illustrates the **“Getting Started”** phase (a.k.a. *“The Hook”*).

Introduction	<h2>Problem-solving Phases</h2> <p>Teaching through problem solving involves the following phases:</p> <ul style="list-style-type: none"><li>• Getting started</li><li>• Working on It</li><li>• Reflecting and connecting</li></ul> <p>The amount of support provided by the teacher during the problem-solving process is based on the needs of the students.</p> <div style="background-color: #e1f5fe; padding: 10px; border-radius: 10px;"><p>Click each phase to learn more.</p><div style="display: flex; justify-content: space-around;"><div style="background-color: #00bcd4; padding: 10px; border-radius: 10px; text-align: center;">Getting Started</div><div style="background-color: #8bc34a; padding: 10px; border-radius: 10px; text-align: center;">Working on It</div><div style="background-color: #e57373; padding: 10px; border-radius: 10px; text-align: center;">Reflecting and Connecting</div></div></div> <div style="background-color: #00bcd4; padding: 10px; border-radius: 10px;"><h3>Getting Started</h3><p>This phase includes:</p><ul style="list-style-type: none"><li>• getting students interested in the problem-solving situation</li><li>• discussing the situation</li><li>• ensuring that students understand the problem</li><li>• asking students to restate the problem in their own words</li><li>• allowing students to ask questions</li><li>• encouraging students to make connections with their prior knowledge</li><li>• modelling think-alouds</li><li>• having manipulatives and other materials available</li></ul></div>
- Differentiated Instruction	
How to Differentiate	
- Problem-based Teaching	
Problem-solving Phases	
Assessment	
+ Coaching	

The **SHOW ME Tab** provides the details of a **Three Part Lesson** (in this case two sample lessons) in action. Video clips of the lesson are included as well as PDF documents of the lesson plan and any other handouts (or “BLMs” = Blackline Masters). The **SHOW ME** section provides a glimpse of each of the Phases in of a **Problem Solving** or **Three Part Lesson**.

<b>OVERVIEW</b>	<b>TELL ME</b>	<b>SHOW ME</b>	<b>LET ME TRY</b>		
Introduction		Estimating Time Lines			Fermi Toothbrushing Problem
<b>The Lesson</b>	<i>Working on It</i>				
<b>Getting Started</b>	In the following video, Chris models how to differentiate the task in order to meet the varying needs of her students.				
<b>Working on It</b>	She demonstrates effective questioning and prompting when discussing the concept of elapsed time. The conversation focuses on student choice of measurement unit and the degree of precision needed in time line notations.				
<b>+ Reflecting and Connecting</b>	 <b>1. Chris provides support to a group of students learning how to use a time line to calculate elapsed time.</b> <b>2. Itirat demonstrates his understanding of how to calculate elapsed time.</b> <b>3. Liam extends his understanding by comparing elapsed time to fractional units.</b>				
<b>Coaching Session</b>					
		<i>In this space, you will see comments that support the action in the video.</i>			

As you move into the actual planning stage of your lesson, go to the **LET ME TRY Tab**. The information provided in this section of the website will direct you to the specific resources that will help you plan your lesson.

eWorkshop.on.ca **ONLINE TEACHING RESOURCE** Home | Sitemap | About This Site | My eWorkshop | Feedback | Help | Français

You are here: Home > Learning Modules > Measurement Login to My eWorkshop

**OVERVIEW** **TELL ME** **SHOW ME** **LET ME TRY**

Introduction **Planning Learning Activities** Learning More About Teaching Measurement

**Planning Learning Activities**

**Identifying Concepts for Learning**

**Determining Prior Knowledge**

**Designing Lessons**

**Assessing Student Learning**

## Planning Learning Activities

Asking yourself the following questions will help you plan effective learning activities:

- What are the concepts I want my students to learn from the activities I plan?
- How will I determine my students' prior knowledge?
- How will I design lessons (learning tasks) to help students explore and learn these concepts?
- How will I assess student learning?

See the **Planning Learning Activities Template (PDF/RTF)** for assistance in planning. Use this template to record ideas about teaching measurement to your students.

A photograph showing two individuals, likely a teacher and a student, sitting at a table and looking at an open book together. The teacher is pointing at the text in the book, and the student is looking at the book attentively. There are other books on the table.

Finally, click on the **Designing Lessons** link (left side of the screen) within the **LET ME TRY** section. This page provides a summary of the activities students should be doing during a problem solving math lesson (e.g., using manipulatives, drawing models, talking, writing, and sharing ideas). It also provides links to specific Ministry developed resources for you to use with your students. For example, the screen shot below shows a link to a variety of *Measurement Activities for Grade 4* (ready to use in PDF format), as well as a photo of the *Guide to Effective Instruction: Measurement (Gr. 4-6)*. All of the Guides to Effective Instruction are available on the **Math Blog** under the **Ministry of Education Tab**.

OVERVIEW TELL ME SHOW ME LET ME TRY

Introduction Planning Learning Activities Learning More About Teaching Measurement

Planning Learning Activities
Identifying Concepts for Learning
Determining Prior Knowledge
<b>Designing Lessons</b>
Assessing Student Learning

## Designing Lessons

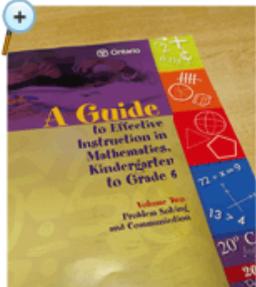
Lessons should include problem-solving tasks in which all students can participate regardless of their level of ability. There should be many opportunities for students to use manipulatives and diagrams to model concepts about measurement and demonstrate their understanding. The lessons should include multiple opportunities for students to communicate, orally and in writing, what they are doing and learning. As you plan lessons, consider the effectiveness and appropriateness of different approaches:

**Guided Instruction** – Would the students benefit from a review of a concept or skill, introduction of a new idea, or learning about a new procedure?

**Shared Instruction** – Would the students benefit from working collaboratively to investigate new ideas or solve problems?

**Independent Instruction** – Would the students benefit from working independently to solve problems, investigate ideas, or practise skills?

You might want to consider teaching the lessons that are featured in the "Show Me" section of this module. They are located in [Measurement Learning Activities – Grade 4 \(PDF\)](#).



In my opinion, e-workshop is the best Ontario developed resource for supporting elementary teachers in the planning and implementation of math and language lessons. It is a comprehensive resource, so please find the time to visit it often!