



Beginning with the End in Mind: Solutions Thinking in Course Design

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Launch Virtual Learning


Solutions Thinking





“Start with your goal and work backwards to solve your problem.”



How does this work in practice?

Launch Virtual Courses



	GOAL	Increase access to high-quality virtual courses
	SOLUTION	Open courses across the state
	STEPS	1. Hire more IDs and start QA position
		2. Build course catalog

Your Turn!



GOAL

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SOLUTION

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STEPS

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Alignment Document



GOAL

One-stop doc for all stakeholders

SOLUTION


Combine our needs with 5th ed QM Rubric





STEPS

1. Start with standards (state and QM)
2. Write and develop from the alignment doc (not the other way around)

	A	B	C	D	E	F	G
1	6th Grade Science Objectives and Alignment						
2	https://dese.mo.gov/media/pdf/curr-mls-standards-ela-6-12-sboe-2016 https://dese.mo.gov/media/pdf/curr-mls-standards-ss-6-12-sboe-2016 https://dese.mo.gov/media/pdf/curr-mls-standards-fa-visual-arts-sboe-2019 https://dese.mo.gov/media/pdf/curr-mls-standards-math-6-12-sboe-2016						
3	Missouri Learning Standard	Course Level Objectives	Unit Objective	Assessment	Activity	Instructional Materials	Tools
4	Unit 1						
5	6-SPS.ST.1 6-SPS.ST.2	Understand how science and technology can contribute to society. Describe a timeline of scientific thought that spans many cultures	First, students will share their responses to encountering a strange-looking shell while walking on a beach. Students will be asked to think of questions a scientist might ask in their attempts to determine what type of shell this might be. Then students will actively participate in the class discussion by replying to two other classmates' posts on their scientific questions on this newfound strange-looking shell.	01.01 Scientific Inquiry	Discussion post that introduces the process of scientific thought through a vignette over a newfound strange looking shell.	N/A	Discussion Board
6	6-SPS.SI.2	Utilize units of scientific measurement to communicate effectively as a scientist.	I can: Identify basic volume, mass, length, and temperature units Distinguish between metric and English units Identify examples where basic units are used in our lives	01.02 Units of Measurement	Download the "Units Of Measurement worksheet."Links to an external site. Use the information to complete the table. Submit the worksheet.	external link: "The History of Measurement - The Last Artifact" embedded Google Slide: "English vs. Metric Units NotesLinks to an external site."	Google Doc
7	6-SPS.SI.2	Utilize units of scientific measurement to communicate effectively as a scientist.	Formative assessment of basic units of measurement; distinguish between English vs. metric.	1.03 English vs. Metric	Complete the following quiz identifying volume, mass, length, and temperature.	N/A	N/A
8	6-SPS.SI.2	Utilize units of scientific measurement to communicate effectively as a scientist.	I can: Identify the 6 main metric prefixes and their value Apply the prefixes to the basic units	1.04 Metric System	Develop your own memory trick to help you remember the 6 main prefixes (plus the base unit).	embedded video: MrRayScience, Metric Units (Brainpop) embedded Google Slides: "Metric System"	N/A
9	6-SPS.SI.2	Utilize units of scientific measurement to communicate effectively as a scientist.	I can: Apply the 6 main metric system prefixes to the basic units	1.05 Prefixes of the Metric System	Complete a quiz to show how to apply the metric prefixes to the basic units.	embedded Google Slides: "Metric System"	N/A

Engaging Course Elements



	GOAL	Build a course with purpose
	SOLUTION	Include interactive elements to keep students engaged
	STEPS	1. identify best spot in the lesson
		2. collaborate with SMEs, QA, and other IDs

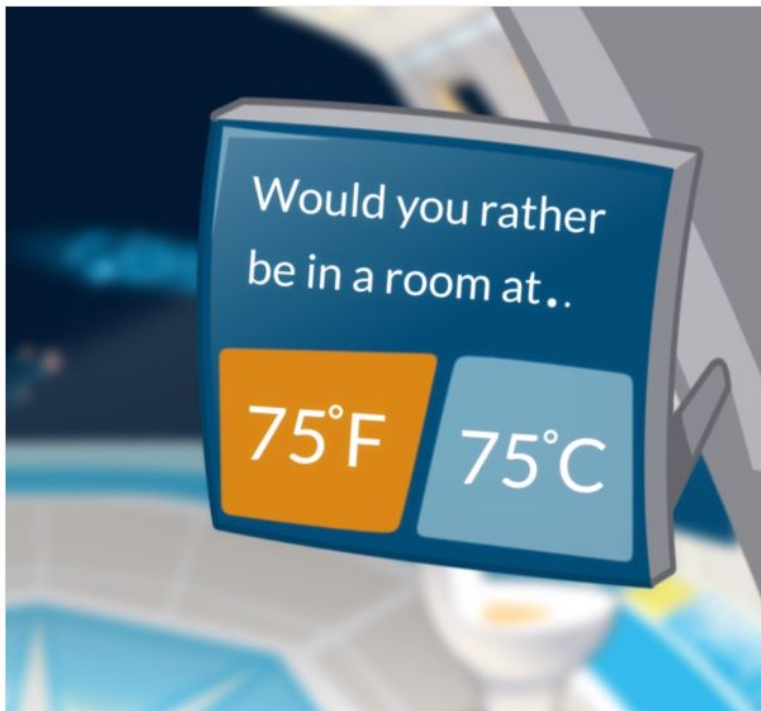


DISCOVER

Let's play "Would you rather..." It's hard to know the answers to some questions unless you know the units of measurement used! Try to answer these questions the best you can.

- Would you rather - Game

Edit



- Measurement Slide



Click to view [Basic Units of Measurement](#) in a new tab.



APPLY

Now that you have read and discussed the units of measurement, complete and submit the worksheet.



Requirements:

- Download the "[Units Of Measurement worksheet](#)."
- Use the information to complete the table.
- Submit the worksheet.

Please submit your completed activity to Canvas, and be sure to let your online instructor know if you have any questions regarding this assignment by sending them a Canvas inbox message.

What is your goal for course design?

Join at Menti.com use code 1194 9627



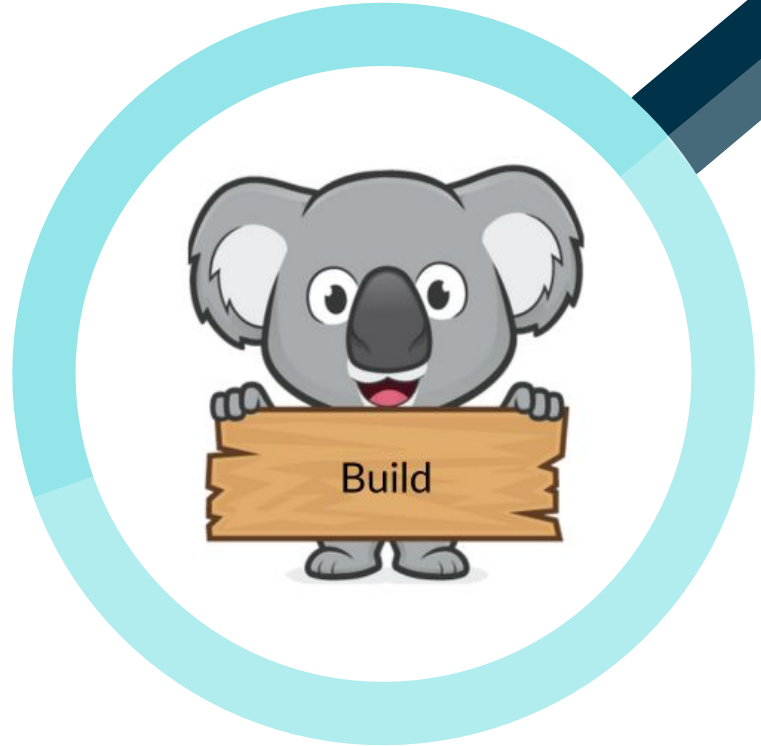
GOAL



SOLUTION



STEPS



Where to next?

Common Formative Assessments

GOAL

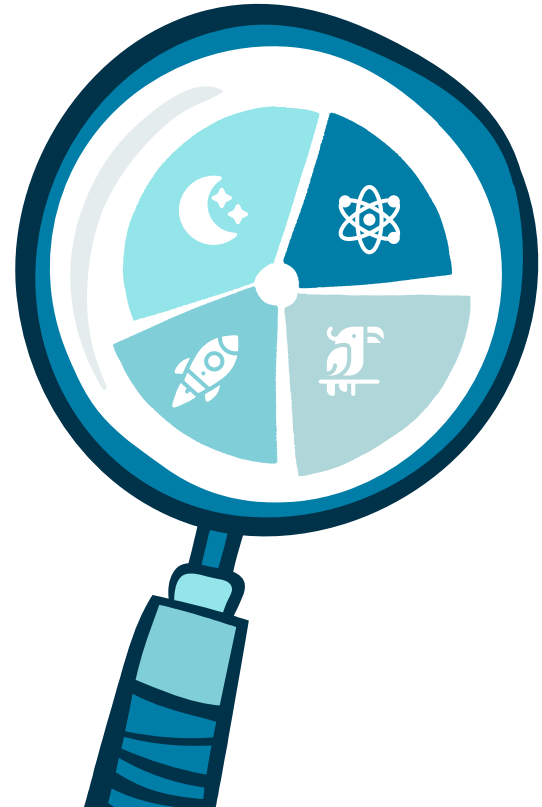
Demonstrate where students are learning and where they need help

SOLUTION

Match standards alignment across seated and virtual courses

STEPS

Wait and see...





Thank you!

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