Community Waters Science Unit

4th grade

Comparing solutions

Community Waters Science Unit:

Lesson 10

Comparing Solutions

Focus Question: How effective is the solution my group modeled?

Learning Target: I can make a claim about my solution and support it with evidence and reasoning.

Engineering Team Discussion & Share out

Share your data with the class!

In your engineering team, discuss:

- Do we feel that our solution successfully reduced the amount of runoff?

- What would be helpful for other teams to know?

Analyze Team Data

- How do the different results compare?

- Were the original models similar enough to each other?

- Did everybody control the same variables?

- Were there enough trials of each solution?

In the Class Data Table:
- What do you notice?
- What does the data mean to us?
- What would you want to do to analyze the data?

Make a claim from evidence

Write a conclusion about the solution your group modeled. Make a claim about the question **"How effective is the solution my team modeled?"**

Your claims should include:

1. the data you gathered when you tested your model.

2. other evidence from what you have read or experienced that supports your claim.

1. **Claim:** A general statement about the effectiveness of the solution.
2. **Evidence:** possibilities to include
   o Data from your tests of the solution.
   o Reference to where the solution has worked elsewhere.
   o Site specific criteria and constrains that it meets, partially meets, or does not meet.
3. **Reasoning:** The reasons why the evidence meets (or does not meet) the criteria for success and the constraints (how the evidence supports the claim).