

# DESIGNING LEARNING TASKS

Name of Curriculum: LBC

## STEP 1: IDENTIFY OPPORTUNITIES IN THE CURRICULUM

Lesson and Page Numbers:

→ "You Light Up My Life" - give conductivity, dissolving, +  
conduct when dissolved properties of sports drink powder

What is the learning goal?

students use properties ~~as evidence~~ of bonding type  
to determine the

of a new compound

What data will students either be given or collect to analyze?

What scientific principle will students use to link their claim and evidence?

Ionic bonding has properties:

conduct: No

Dissolve: Yes

conduct when dissolved: yes



## STEP 2: DESIGN COMPLEXITY OF THE LEARNING TASK

For each of the following characteristics consider how simple or complex you want the learning task to be depending on the needs of your students.

What question will you ask students?

What type of bonding does the sports drink powder have?

What specific data will you either provide students or have students collect?

3 pieces (see other side) - also distractors:  
color, flavor, price

How much data will you have students analyze?

3 pieces - they should identify which pieces are relevant

What variation of the framework do you want students to include in their response?

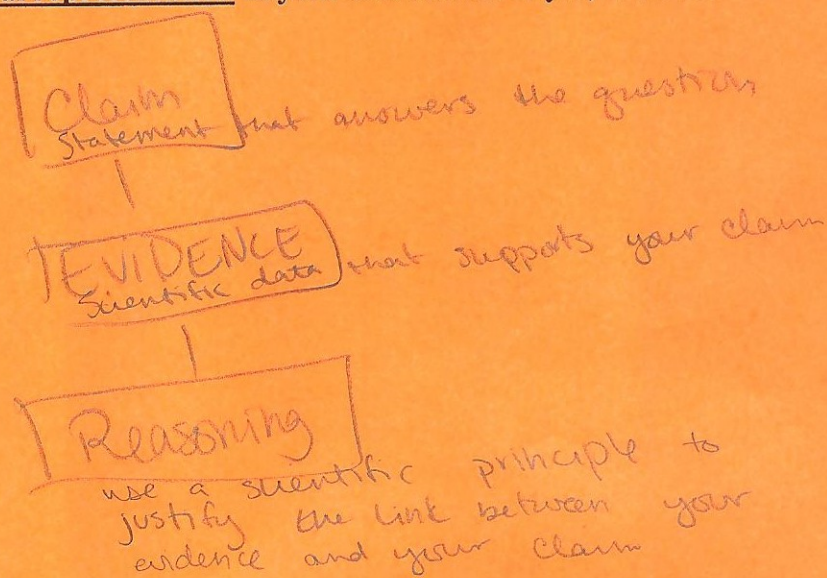
For example - complexity of the evidence, complexity of reasoning and inclusion of rebuttal

Variation #2: We're introducing framework, but want sufficient evidence to rule out other 3 bonding types.



### STEP 3: CREATE CLASSROOM SUPPORTS

Do you want to include any type of visual representation in your classroom? If yes, describe or sketch the representation.



Do you want to provide students with curricular scaffolds? If yes, draft the scaffolds below.

Consider – content specific, generic or combination AND level of detail to include

Claim: write a statement that answers the question – What type of bonding is present in the sports drink? Write 1 complete sentence.

Evidence: Provide scientific evidence to support your claim – use the data table above to find 3 pieces of evidence.

Reasoning: write a statement that tells why your data count as evidence for your claim. Your statement should include the scientific principles that link your evidence and claim. How do the data that you used as evidence relate and justify your claim of which type of bonding is present? You can find some helpful scientific principles in your sheet with the 4 types of bonding.