



Let Them Show You: Formative Assessments That Let Every 1st Grader Shine

Fall 2025



The SALDEE Team at NSTA 2025



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Elementary Science Specialist

Agenda



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What is SALDEE
and How is It
Unique?

02

SALDEE in Action

03

Looking at
Student Work

04

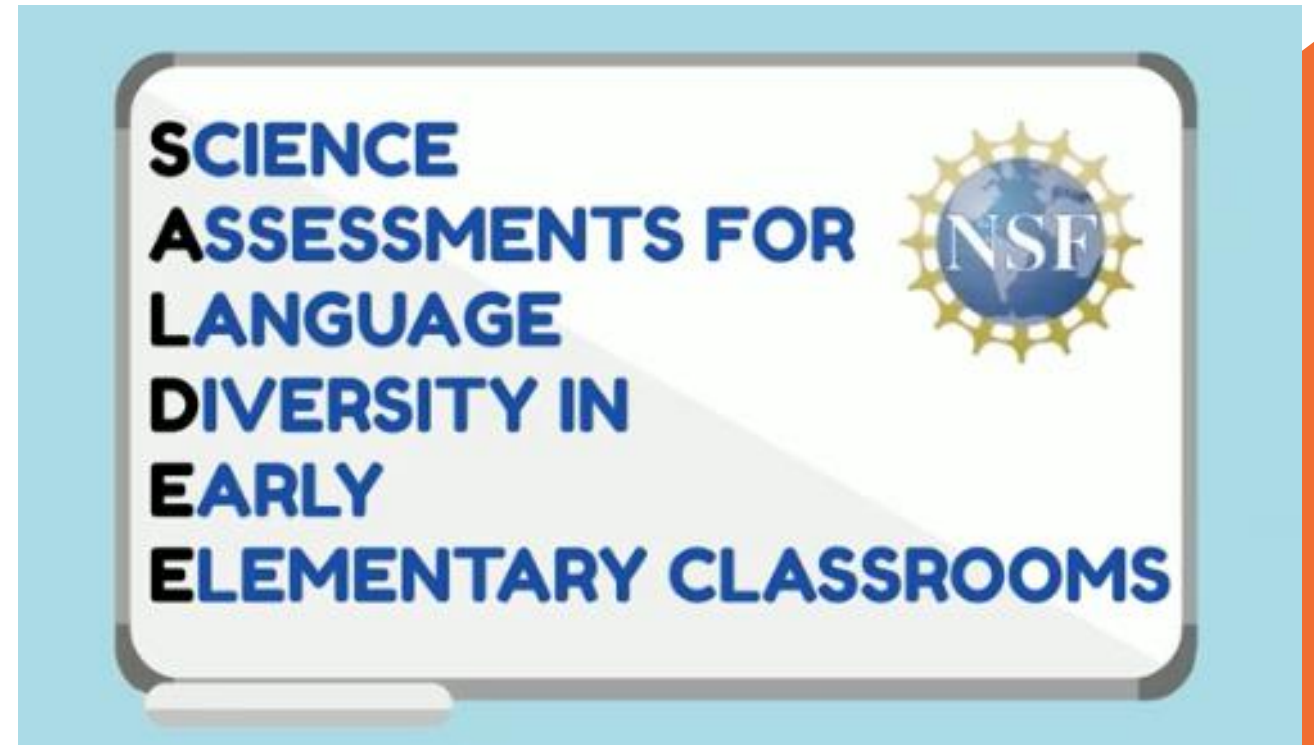
Exploration Time

05

Feedback and
Opportunities to
Join

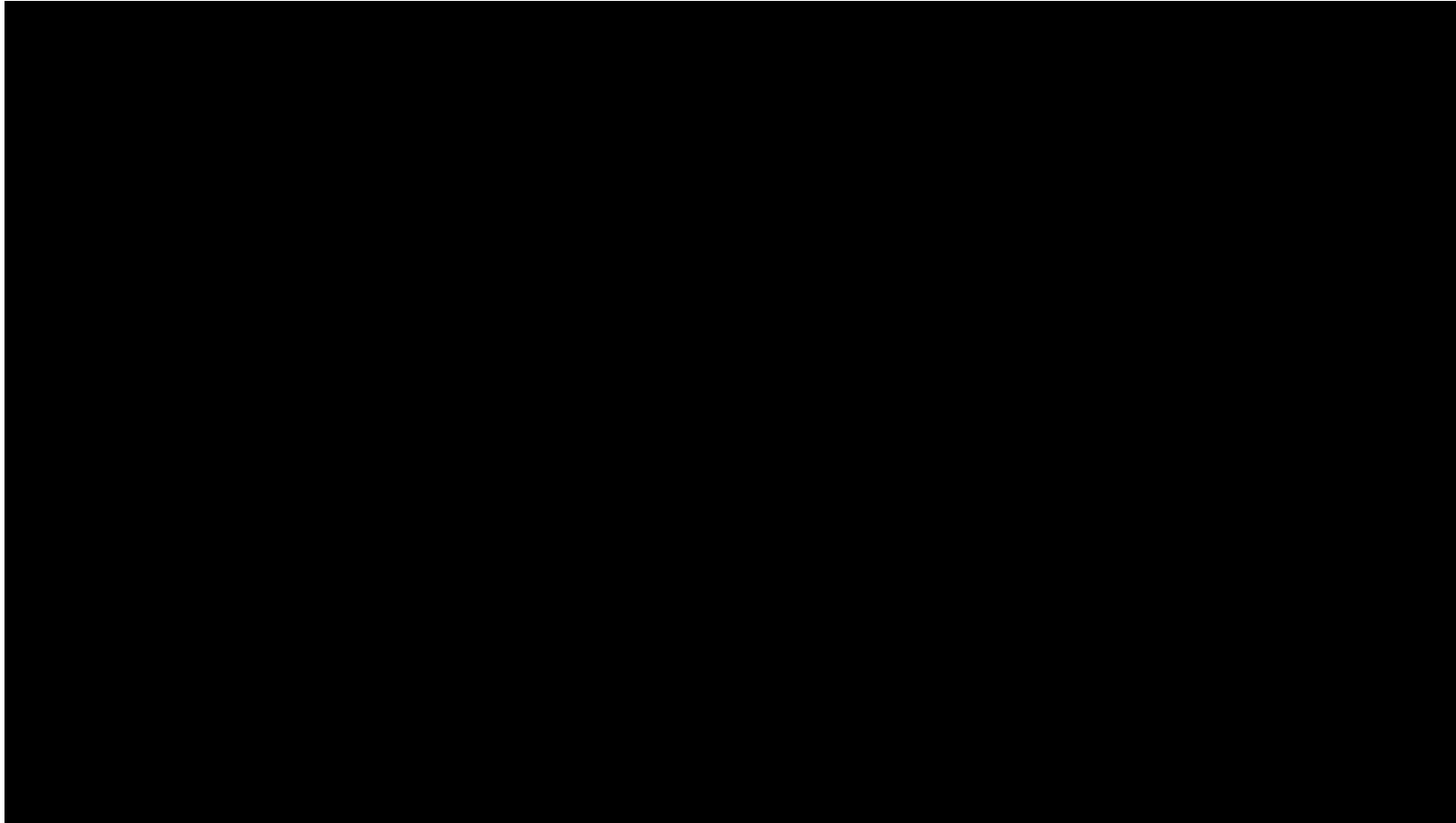


What is SALDEE and how is it unique?





SALDEE Primary Investigator, Nonye Alozie





SALDEE in Action





Integrating SALDEE into Existing Curriculum

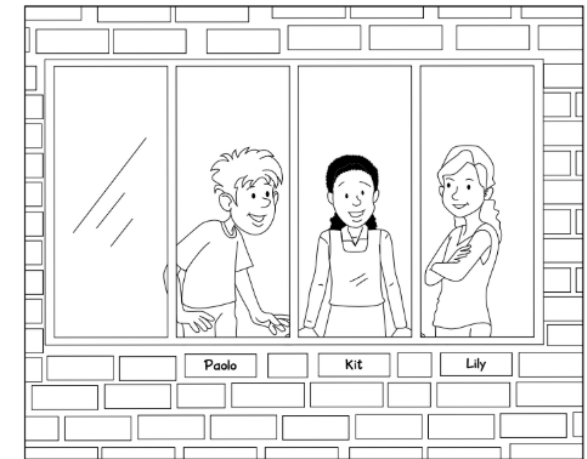
Paolo: *Light can pass through all materials.*

Kit: *Light can pass through some materials.*

Lily: *Light does not pass through
any materials.*

Properties of Light

Which friend has the best idea
about light?



Students explored with light and a variety of different materials



Students made 3 groups of materials based on their observations





Individual Check Task: Cup of Orange Juice



Cup 1



Cup 2



Cup 3

Looking at Student Work

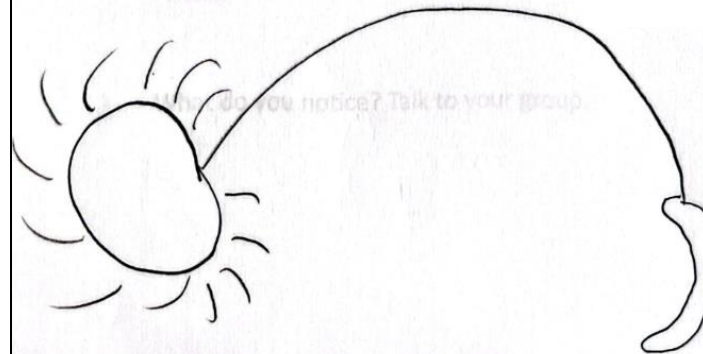


2 Complete the sentence stem below.

The difference between daytime and nighttime is that the sun...

The sun sets.

4 This is Marta's graph showing how long the sun was in the sky for



The sun goes into the moon.
It's day and then night.

Mara's Observations



Student Worksheet

Mara looked out the window and saw the sun in the sky. She wondered if she would observe the sun in the same place in the sky at different times during the day.

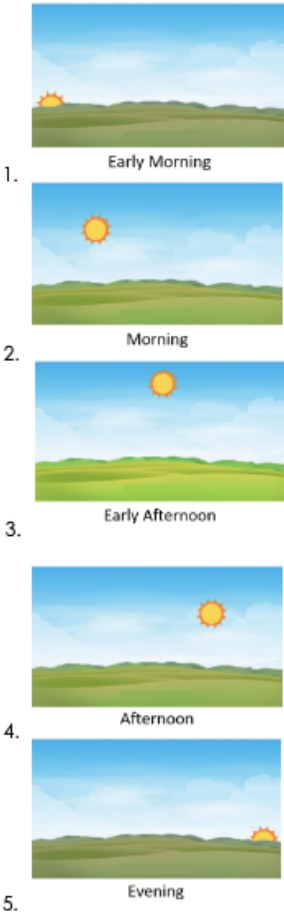
Mara looked out the window 5 times during the day. She recorded the position of the sun and the time of day. These pictures show what Mara recorded.

1

What do Mara's observations show?

- A. The sun was in the **same** position at different times during the day.
- B. The sun was in **different** positions at different times during the day.

Mara's observations

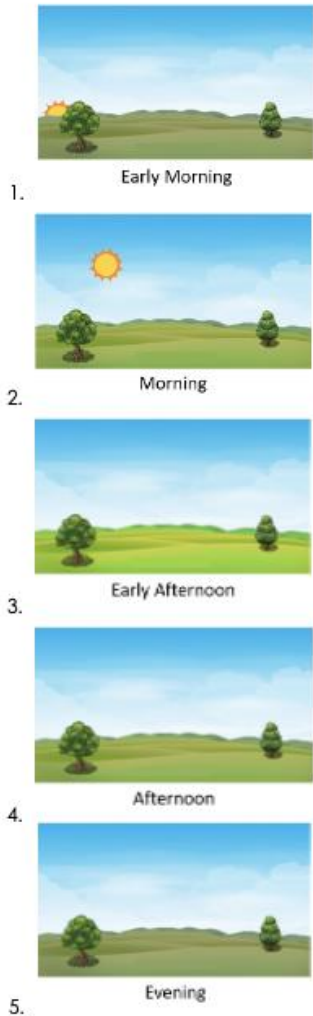


Mara wondered where she would observe the sun in the sky the next day. Predict what you think Mara will observe if she looks out the same window at the same times the next day.

2

Look at the pictures to the right.

Draw **on the pictures** where you think Mara will observe the sun in the sky at the different times. The first two are drawn for you.



Rubric



Question 2

FKSAs:

2. Students are able to identify that a pattern exists based on observations of the placement of object(s) in the sky (e.g., sun, moon, and stars) across different time points.
3. Students recognize that the location of the moon and stars and the relative height of the sun in the sky can be predicted during certain times of the year.

Note: Correct drawings should show the arc of the sun's movement, not just movement up and down.

Student's response	Indicative of
Accurately draws 3 positions of the sun that are relatively similar to Day 2 (in the correct order)	Student is able to predict where the sun may be during certain times of day and recognizes that the sun moves in the same direction creating an arc every day.
Accurately draws 1–2 positions of the sun that are relatively similar to Day 2 (in the correct order) <i>Example: Student draws similar positions of the sun for afternoon and evening, but not for early afternoon</i>	Student is able to predict some positions of the sun at certain times of day but has challenges predicting some positions of the sun at other times of day. Student may also have challenges recognizing that the sun moves in the same direction creating an arc every day.
Inaccurately draws 3 positions of the sun OR Does not respond	Student may be able to identify the sun but has challenges predicting positions of the sun at certain times of day. Student may also have challenges recognizing that the sun moves in the same direction creating an arc every day. OR Student may have difficulties understanding the question.

Student A

Student's response	Indicative of
Accurately draws 3 positions of the sun that are relatively similar to Day 2 (in the correct order)	Student is able to predict where the sun may be during certain times of day and recognizes that the sun moves in the same direction creating an arc every day.
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Mara wondered where she would observe the sun in the sky the next day. Predict what you think Mara will observe if she looks out the same window at the same times the next day.

2

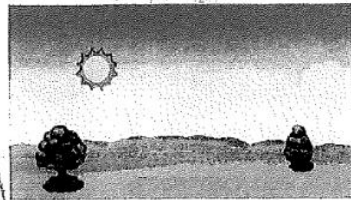
Look at the pictures to the right.

Draw **on the pictures** where you think Mara will observe the sun in the sky at the different times. The first two are drawn for you.



Early Morning

1.



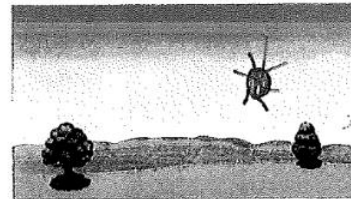
Morning

2.



Early Afternoon

3.



Afternoon

4.



Evening

5.

Student B

Student's response	Indicative of
Accurately draws 3 positions of the sun that are relatively similar to Day 2 (in the correct order)	Student is able to predict where the sun may be during certain times of day and recognizes that the sun moves in the same direction creating an arc every day.
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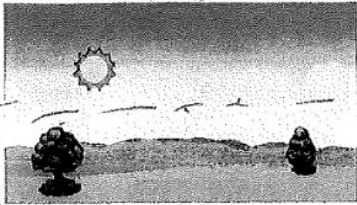
2

Look at the pictures to the right.

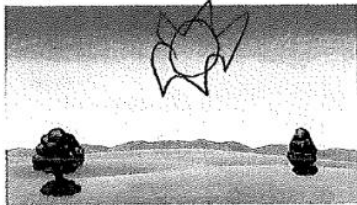
Draw **on the pictures** where you think Mara will observe the sun in the sky at the different times. The first two are drawn for you.



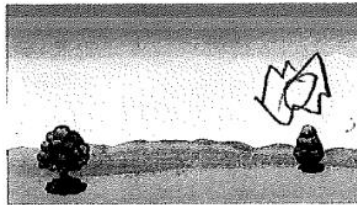
Early Morning



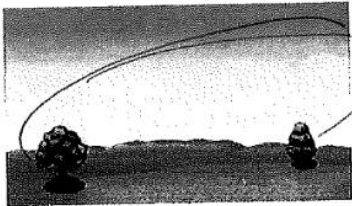
Morning



Early Afternoon



Afternoon



Evening

Student C

Student's response	Indicative of
Accurately draws 3 positions of the sun that are relatively similar to Day 2 (in the correct order)	Student is able to predict where the sun may be during certain times of day and recognizes that the sun moves in the same direction creating an arc every day.
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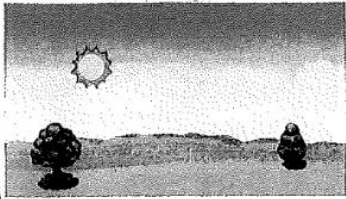
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1.



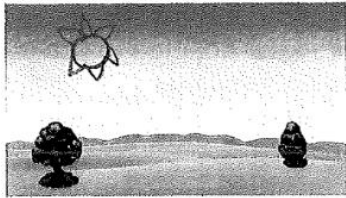
Early Morning

2.



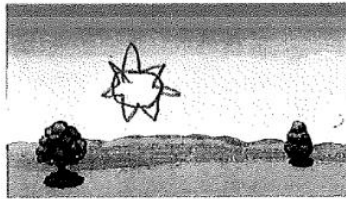
Morning

3.



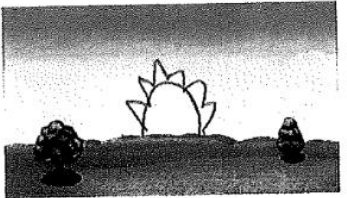
Early Afternoon

4.



Afternoon

5.



Evening

Student D

Student's response	Indicative of
Accurately draws 3 positions of the sun that are relatively similar to Day 2 (in the correct order)	Student is able to predict where the sun may be during certain times of day and recognizes that the sun moves in the same direction creating an arc every day.
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Mara wondered where she would observe the sun in the sky the next day. Predict what you think Mara will observe if she looks out the same window at the same times the next day.

2

Look at the pictures to the right.

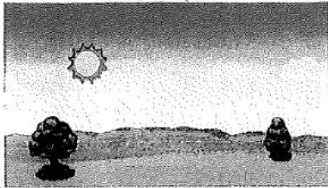
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1.



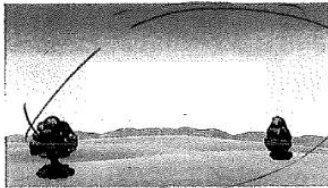
Early Morning

2.



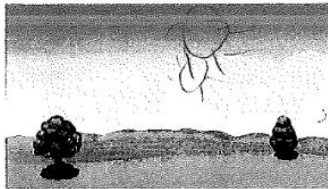
Morning

3.



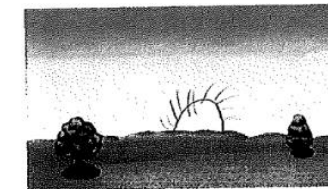
Early Afternoon

4.



Afternoon

5.



Evening

Given these student responses...



- **What do the students know and understand?**
- **What recommendations would you have for next instructional steps?**

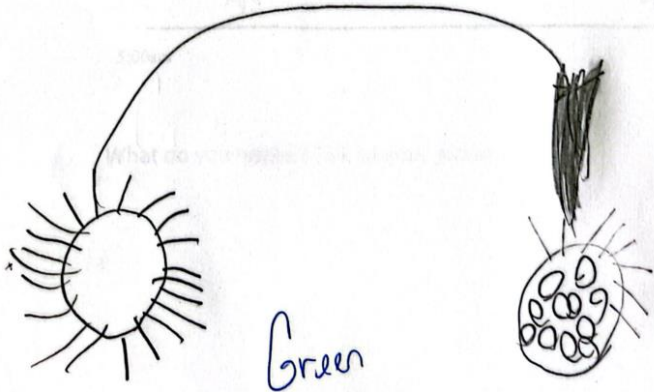
Let Them Show You What They Know



2 Complete the sentence stem below.

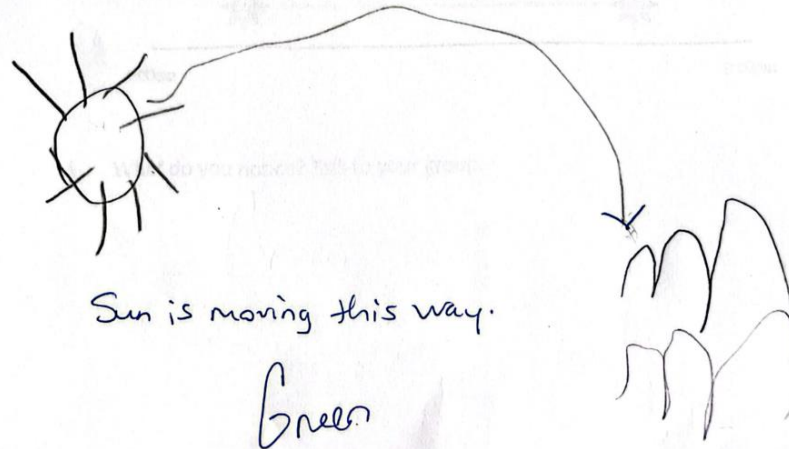
The difference between daytime and nighttime is that the sun...

Rises



2 Complete the sentence stem below.

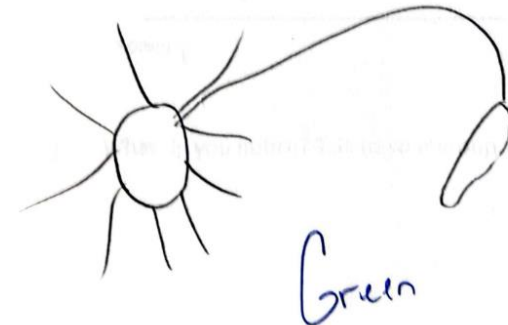
The difference between daytime and nighttime is that the sun...



2 Complete the sentence stem below.

The difference between daytime and nighttime is that the sun...

the sun rises
and sets.





Exploration Time



Folder: Tasks and Student transcripts



Exploration Time: Life Science Tasks



- Go Baby

- Students use information from text and video to communicate a pattern for how caterpillar and chameleon offspring survive by themselves.



- Baby Survival

- Students use information from text and pictures to communicate a pattern for how parents respond to, and help, their offspring to survive.



Tasks Only

Guiding Question:

Predict: In what ways will these tasks foster student interaction?

Student Interactions with the Tasks

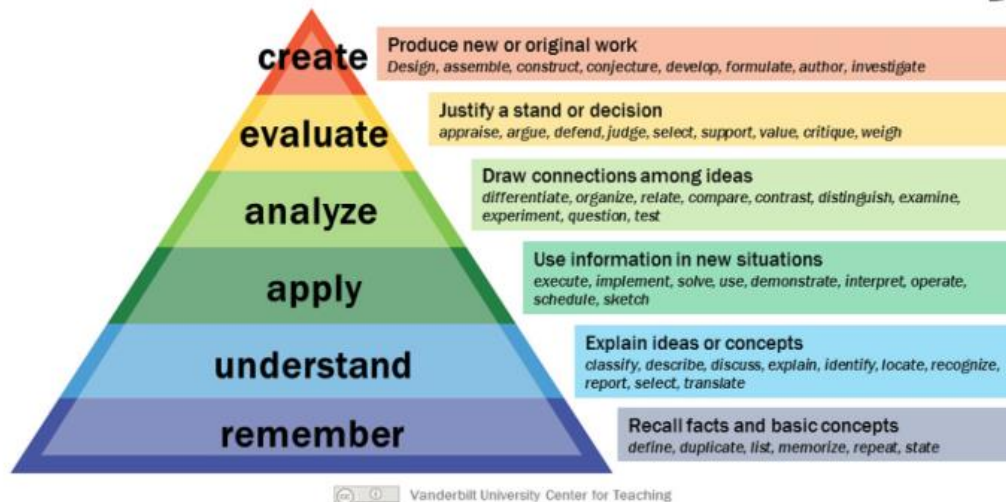


Mark the places in the transcript where you see these things:

- SE = Student explains their thinking
- SS = Student-to-student interaction
- T? = Teacher questions (and any that are higher-order questions)



Bloom's Taxonomy



Tasks Only

Student Interactions with the Tasks



Mark the places in the transcript where you see these things:

- SE = Student explains their thinking
- SS = Student-to-student interaction
- T? = Teacher questions (and any that are higher-order questions)



Guiding Questions:

What did you notice about the student interactions with the task?

What kind of follow-up questions might you ask to generate students' higher-order thinking or deeper engagement with the tasks?



Feedback and Opportunities to Join



Please share your feedback on the tasks you saw today!



Cup of
Orange Juice

Mara's
Observations

Go Baby

Baby
Survival



For those who teach science to first or second graders...

Join us!



Participate in PD

- Join the virtual PD session (2 hours)
- Afterwards, complete a pre-survey (30 minutes)

Administer ~6 tasks

- Share each task with your students (10-15 minutes of class time each) and fill out a survey afterwards (5 minutes each task)
- Evaluate student responses with the SALDEE rubric and share them with SRI (30 minutes each task)

Participate in an interview

- Tell us about your experiences (60 minutes)
- Receive honoraria of up to \$400





To express interest in the SALDEE study,
please email saldee@sri.com
or use the QR code.



Thank you for coming today!