

**Reading to Learn  
in Science**

Reading to Learn in Science explores each of the specific challenges of science texts and presents strategies that teachers can incorporate before, during, and after reading science texts to help improve reading comprehension in science.

#### **Examples of Strategies Available:**

##### **BEFORE**

- Anticipation Guide
- Productive Talk Moves
- 4 Corners
- Picture Walk
- Argument Lines

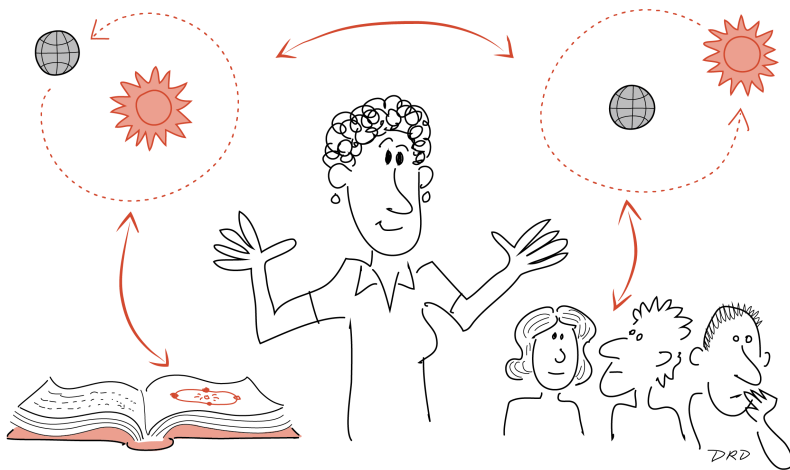
##### **DURING**

- Anticipation Guide
- Reciprocal Teaching
- DARTS
- Cornell Notes
- Listening Triads

##### **AFTER**

- Anticipation Guide
- Folding Graphic Organizers
- Frayer Model
- Listening Triads
- Argument Lines

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## **Classroom Strategies to Help Students and Teachers Address the Challenges of Comprehending Science Texts**

Science education goes far beyond hands-on activities and experiments. Reading is not only a crucial way for students to learn science content, but it is also an important part of what professional scientists actually do. Many science teachers assume that students will receive enough general literacy instruction from ELA teachers to be prepared for science class, but in reality, science teachers need to make teaching science literacy a priority in their classrooms.

Science texts often pose a number of challenges to the uninitiated. There can be difficult new words, or familiar words with unfamiliar meanings. Abstract nouns swallow up complex processes (e.g., stratification), and passive verbs conceal the doers of deeds (e.g., radiation was detected). Text sits side-by-side with other modes of representation in ways that are supposed to clarify information, but often require new interpretive skills. The RTLS website provides science teachers with strategies to address these challenges.

[serpinstitute.org/reading-science](http://serpinstitute.org/reading-science)

#### **SAMPLE STRATEGY**

**Argument Lines** is a tool for improving discussion of a scientific question with two plausible answers. The two answers are posted at opposite ends of the room, and students line up between them, standing close to one answer if they believe it's correct, or in the middle if they aren't sure.

The teacher can then prompt adjacent students to talk with each other, explain and justify their positioning, and redistribute themselves along the line if their ideas have changed.

