

TEKS Grade 7 - S.7.7.B

Speed and Velocity in Linear Motion

- ✓ 7th Grade Science TEKS Curriculum Bundle
- ✓ Variety of Lesson and Activity Types
- ✓ Digital + Printable Formats



Teach With
Fergy

NEW 2024

Resources Included

- ✓ **Complete S.7.7.B - 7th Grade Science TEKS Curriculum.**
- ✓ **Variety of Lesson Types** - Includes lessons, activities, assessments, and more.
- ✓ **Daily Teaching Timeline Included** - Includes a ready-to-go, daily teaching timeline.
- ✓ **Digital + Printable Formats** - Ideal for classroom, hybrid, or remote learning environments with flexible access options.

Daily Teaching Timeline Included

TEKS – Grade 7

5.7.7 Force, motion, and energy. The student describes the cause-and-effect relationship between force and motion.

5.7.7.B - The student is expected to distinguish between speed and velocity in linear motion in terms of distance, displacement, and direction.

Resources:

- *Calculating Average Speed, Velocity, and Displacement - SE Lesson Bundle*
 - *Average Speed Velocity and Displacement - Digital Scavenger Hunt*
 - *Calculating Average Speed, Velocity, and Displacement - Lab Station Activity*
 - *Calculating Average Speed, Velocity, and Displacement – Lesson*

TEKS Science Daily Teaching Plan

Lesson Length: 55 minutes,
Timeframe: 4 Days

Calculating Average Speed, Velocity, and Displacement – SE Lesson

Engagement Phase

Your students will watch the video 'Gridiron Physics' and answer the questions found in the file – *Engagement – Gridiron Physics*

Teacher Notes:

- The video is about 5 minutes long
- You may need to show the video more than once or pause when an answer is given to one of the questions.

Exploration Phase

Exploration – Lab Station Activity

- In groups of 2-3, have your students complete *Exploration – Lab Station Activity*. Once they're done, they will submit their passport to you.

Teacher Notes:

- The complete instructions for my Lab Station activity can be found in the *START HERE – Instructions* file.

Duration: 20 – 30 minutes

Teacher Role – Facilitate learning and guide student understanding

Goals

- ☐ Connect student's experiences
- ☐ Create interest
- ☐ Ask questions
- ☐ Understand the objectives of the lesson

Duration: 1 hour

Teacher Role – Facilitate learning and guide student understanding

Goals

- ☐ Students receive real experience with the topic
- ☐ Students use and develop creative thinking skills
- ☐ Students make observations, record

Teacher Notes:

- All videos can be accessed directly from the PowerPoint. To retrieve them, click on the video icon while in slideshow mode and it will automatically open for you. If they don't open, right-click the image and select Edit Hyperlink or something similar.
- I've created a video walkthrough if needed. It can be accessed here - <https://youtu.be/oCjKIP9SaDQ>
- I have also enclosed a .PDF version of both the teacher and student versions.

Elaborate Phase

Elaborate – Scavenger Hunt

Your students will complete – *Elaborate – Scavenger Hunt*. This activity will require your students to move beyond what was covered directly in the lesson and allow them to further develop their understanding.

Teacher Notes:

- Students will work individually or in small groups
- Students will need one device per group.

Evaluate Phase

Quiz

Have your students complete - *Evaluate – Calculating Average Speed, Velocity, and Displacement Quiz*

Teacher Notes:

- It's sometimes best to have the students peer evaluate
- Placing students in small groups and having them exchange papers to mark will accomplish two things
- 1) Provide immediate feedback on the questions they just completed
- 2) Significantly reduce your marking time
- Peer evaluation is not needed, only suggested when appropriate

Duration: 1 hour

Teacher Role – Facilitate learning and keep students focused

Goal

- ☐ Students use their newly obtained knowledge to propose solutions and extend their learning to new situations

Duration: 30 min

Teacher Role – Distribute and collect evaluation

Goal

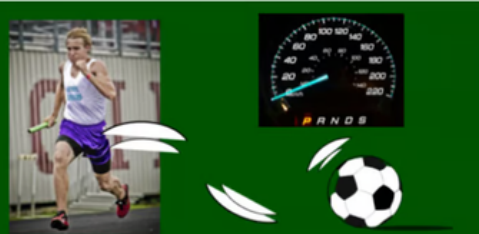
- ☐ Students are given the opportunity to demonstrate their understanding and evaluate their own progress

Calculating average speed, velocity, and displacement

- Motion Terms
- Scalar Quantities
- Average and Instantaneous Speed
- $v = d/t$
- Linear Motion
- Velocity
- Displacement
- Position-Time and Velocity-Time Graphs



Calculating Average Speed, Velocity, and Displacement Lab Station Activity



7 Lab Station Activities to get your kids out of their seats and engaged in their learning

Device-Based Scavenger Hunt Calculating Average Speed, Velocity, and Displacement

Includes

- 5 Unique Locations
- Online form submission
- Answer Key



Works on all smartphones, tablets, Chromebooks, and laptops

- 100% Digital
- Simulations
- Quizzes
- Videos
- Games
- and more



Who is this Bundle for?

- **Teachers who teach 7th grade science in Texas**
- **Teachers who want multiple resources at their fingertips including lessons and a variety of activities, in order to prepare their students for the STAAR Science Exam**
- **Teachers who don't have time to develop their own resources or organize what to teach and when**

