



2024

DYNAMIC IPC

Empowering ALL Texas Learners to Reach their Summit

**Built By Texas Educators
For Texas Educators**

Texas based publisher with curricula
created by over 75 current and former
Texas educators

**Built for Texas
TEKS-SEPs-RTCs-ELPS**

**Ready to
Learn More?**

Scan the QR code
to visit our website



Kate the Chemist

K-12 Video Series



Summit K12 has teamed up with UT Austin Professor and best-selling science author, Dr. Kate Biberdorf, to create Phenomena-based videos specifically for the 2024 Science TEKS.

- K-12 Phenomena-Based Videos
- Teacher Pre-Lab Prep Videos
- Student Pre-Lab Videos
- Full Length Virtual Science Lab Videos

K-12 Texas Virtual Field Investigations

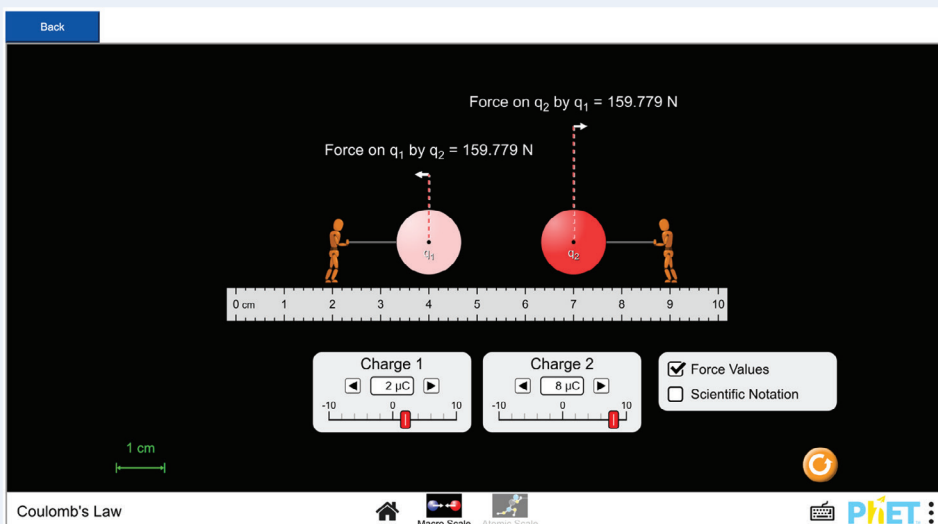
ALL K-12 students will have the opportunity to investigate phenomena throughout dozens of the most popular state parks and engineering marvels in Texas.

The 2024 TEKS Virtual Field Investigations series was created specifically for the Texas Science Adoption.



Hands on Investigations and Virtual Labs

Comparative, Descriptive, and Experimental Investigations to engage students and support sensemaking.



Includes Summit
K12 Lab Guides
developed to
support the 2024
Science TEKS.

Concise and Complete Teacher Supports

IPC UNIT 1

Unit 1: Forces and Motion

Unit	Lesson Name	Lesson Guide	PowerPoint	Study Guide and Key	E-Poster	Interactive E-Poster
1.1	Velocity					
7.7B	Speed vs. Velocity					
1.2	Acceleration					
8.7A	Newton's Second Law of Motion					
1.3	Mass, Acceleration and Net Force					
6.7B	Balanced and Unbalanced Forces					
1.4	Momentum and Impulse					

TEKS Scaffold

TEXAS—High School

IPC

TEXAS IPC.8B

Chemical Equations and Conservation of Mass

♦ A chemical equation describes what happens in a chemical reaction.

♦ A chemical equation is considered balanced when the type and number of atoms in the **products**, is equal to the type and number of atoms in the **reactants**.

♦ **Coefficients** are added in front of compounds and elements to balance a chemical equation.

♦ **Subscripts** never change as they represent the reaction components.

coefficient subscript

2H₂O → 2H₂ + O₂

yields (produces)

1 reactant 2 products

2H₂O 2H₂ O₂

chemical equation chemical reaction coefficient law of conservation of mass product reactant subscript yield

Return to Unit 1 Unit 1


TEXAS—High School

Interactive E-Poster Example

Teacher Supports Include:

- Lesson and Lab Guides
- Scope and Sequence
- Pacing Guides
- Reports and Dashboards
- Anchoring Phenomena Table
- 3D Teaching and Learning
- Image Bank
- Assessment Bank
- Formative Assessments
- Year-Round Responsive Support
- Asynchronous Online Teacher Training
- Zoom and Onsite Professional Learning

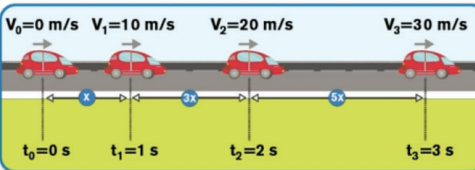
High Quality TEKS Lesson Videos



TEKS IPC.5A

Acceleration

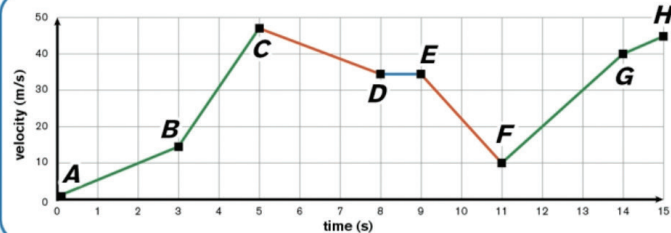
$V_0 = 0 \text{ m/s}$ $V_1 = 10 \text{ m/s}$ $V_2 = 20 \text{ m/s}$ $V_3 = 30 \text{ m/s}$



$t_0 = 0 \text{ s}$ $t_1 = 1 \text{ s}$ $t_2 = 2 \text{ s}$ $t_3 = 3 \text{ s}$

$$a = \frac{V_f - V_i}{\Delta t}$$


a = acceleration (m/s^2)
 V_f = final velocity (m/s)
 V_i = initial velocity (m/s)
 Δt = change in time (s)




time (s)


Types of Acceleration:

- positive acceleration
- negative acceleration
- change in direction
- no acceleration




acceleration final velocity initial velocity instantaneous acceleration



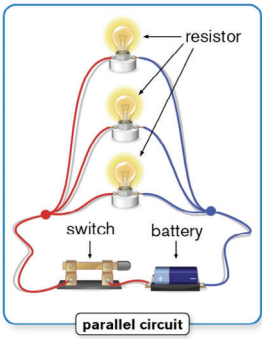
-9:19 1x auto 

- 100% of the IPC Content TEKS and SEPs include high quality Lesson Videos
- 100% of the Videos were specifically created for 2024 K-12 Science TEKS by Texas Science Educators and authors along with a team of Professional Documentary Film Editors and storytellers

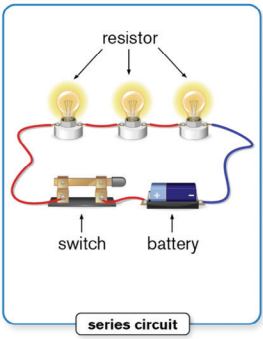


TEKS IPC.8A

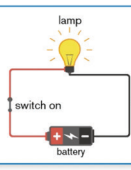
Series and Parallel Circuits



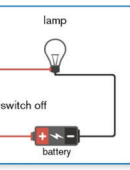
parallel circuit



series circuit




switch on



switch off

Transfer of electrical energy can occur in a closed circuit.


Transfer of electrical energy cannot occur in an open circuit.




battery closed circuit complex circuit current open circuit

parallel circuit resistor series circuit switch

Current flows from the positive end to the negative end of a circuit.



0:03 / 6:10 

Formative and Summative Assessments and Assessment Bank

Create a Custom Assessment

Assessment Name:

Number of Items:

Select Item Types:

Select Units to include:

% Dual-coded:

Force and Motion	Energy Transfer and Conservation	Structure and Properties of Matter	Changes in Matter
Velocity	Series and Parallel Circuits	Atomic Structure, Bonding, Reactivity, and the Periodic Table	Chemical Changes
Acceleration	Electromagnetic Induction	Patterns of Elements' Physical and Chemical Properties in the Periodic Table	Chemical Equations and Conservation of Mass
Mass, Acceleration, and Net Force	Conservation of Energy	Physical and Chemical Properties in Everyday Life	Nuclear Reactions - Advantages and Disadvantages
Momentum and Impulse	Thermal Energy: Conduction, Convection, Radiation	Atomic Energy Levels, Emission Spectra, and Wave Particle Duality	Environmental Impact of Chemical Reactions
Four Fundamental Forces	Transfer of Energy by Waves		
Gravitational and Electrical Forces	Waves Interference, Reflection, and Refraction		
	Renewable and Nonrenewable Resources		

Select Options, then Create

Create

The NEW Assessment appears in the table and is ready to assign to your class



Assessment Bank


Date Created	Custom Assessment Name	Avg. Score	PLD	Assign
9/28/24	Velocity and Acceleration review	65%	Approaches	
11/4/24	Mass, Acceleration, and Net Force Quiz	87%	Meets	
12/4/24	Energy Transfer and Energy Conservation Test	92%	Masters	
1/12/25	TEKS IPC.7A Atomic Structure quiz	81%	Meets	
2/3/25	Unit 3.5 (IPC.7F) quiz	90%	Masters	
3/2/25	Dr. Kate's Changes in Matter Exam	Start		

Create New

Includes Items Written for the 2024 TEKS

QUESTION 3

Two boxers are sparring in a ring. One boxer wears gloves, while the other boxer uses her bare fists. Why is the impulse different in the two boxers if the acceleration and mass are the same? [IPC.3A]

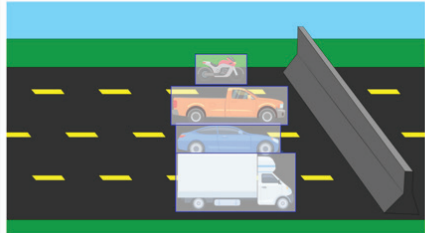


Select one:

- ☐ a. The boxer with bare hands increases the time that the impact of the collision is felt. This reduces the impulse of her punch.
- ☐ b. The boxer with bare hands decreases the time that the impact of the collision is felt. This reduces the impulse of her punch.
- ☐ c. The boxer with the gloves increases the time that the impact of the collision is felt. This reduces the impulse of her punch.
- ☐ d. The boxer with the gloves decreases the time that the impact of the collision is felt. This reduces the impulse of her punch.

QUESTION 1

Four vehicles traveled at the same velocity when they collided with a concrete barricade. Which vehicle had the greatest momentum? Select ONE correct answer.



Vocabulary Mastery

TEKS Content Vocabulary | Science Tools Vocabulary |
SEPs & RTCs Vocabulary | Science Cognates



Volunteers work to clean up after a
oil to spill in

✓ Select

tracer
nuclear event
catastrophic accident
medical image

causes

● ○ ○ ○ ○ ○



A yellow

✓ Select

gas
precipitate
catalyst
reactant

forms when two clear liquids are mixed in the
same beaker.

○ ○ ○ ○ ○ ●



catastrophic accident

accidente catastrófico

noun



A catastrophic accident is a sudden and life-threatening disaster.

● ○ ○ ○ ○ ○ ○ ○



precipitate

precipitado

noun



A precipitate is a solid that forms due to a chemical change. This is often seen in a double replacement reaction.

Finish Attempt

○ ○ ○ ○ ○ ●

Image Bank

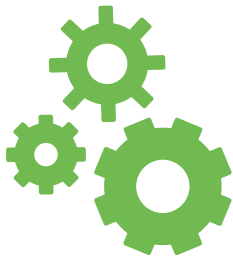
- 500-1,000 images per grade level/subject
- Minimum 15-25 images per content TEKS
- Images for all SEPs Vocabulary Words
- Images for all Science Tools Vocabulary

Summit K12 Image Bank



Teaching Science through Phenomena using the 3D Model

Science TEKS Content Standards



Scientific and Engineering Practices

Recurring Themes and Concepts



TEKS-SEPs-RTCs Crosswalk

Subject	Category	SEPs TEKS	Dynamic IPC TEKS Lessons, Labs, Investigations, and Explore Activities																				Totals by SEPs		
			1.1	1.2	1.3	1.4	1.5	1.6	2.1	2.2	2.3	2.4	2.5	2.6	2.7	3.1	3.2	3.3	3.4	3.5	4.1	4.2		4.3	4.4
IPC	Scientific and engineering practices	IPC.1A		X				X		X							X							X	5
IPC	Scientific and engineering practices	IPC.1B				X		X	X	X			X						X	X	X		X		9
IPC	Scientific and engineering practices	IPC.1C									X							X	X	X					4
IPC	Scientific and engineering practices	IPC.1D						X	X	X										X	X				5
IPC	Scientific and engineering practices	IPC.1E			X			X		X	X	X	X					X			X				8
IPC	Scientific and engineering practices	IPC.1F		X	X		X	X			X		X			X		X		X				X	10
IPC	Scientific and engineering practices	IPC.1G					X	X	X		X	X		X		X					X				8
IPC	Scientific and engineering practices	IPC.1H				X	X																		2
IPC	Scientific and engineering practices	IPC.2A						X			X					X			X						4
IPC	Scientific and engineering practices	IPC.2B	X			X	X				X		X												5
IPC	Scientific and engineering practices	IPC.2C	X	X	X	X																X			5
IPC	Scientific and engineering practices	IPC.2D				X				X			X									X			4
IPC	Scientific and engineering practices	IPC.3A	X			X	X	X		X		X				X	X	X	X	X	X	X	X	X	16
IPC	Scientific and engineering practices	IPC.3B	X			X			X	X				X	X	X	X		X	X		X	X	X	13
IPC	Scientific and engineering practices	IPC.3C	X			X								X	X				X				X		6
IPC	Scientific and engineering practices	IPC.4A											X			X	X	X	X		X			X	7
IPC	Scientific and engineering practices	IPC.4B		X			X	X				X			X		X	X		X		X		X	10
IPC	Scientific and engineering practices	IPC.4C																X				X			2
IPC	Recurring themes and concepts		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	22
Totals by Unit			6	5	6	10	6	7	6	7	9	4	7	5	4	8	6	4	9	6	6	11	5	8	145