

Work, Energy, and Power Unit

- ✓ Complete Work, Energy, and Power Unit
- ✓ 5 Lessons, 9 Activities, 1 Unit Test
- ✓ Google & Print Ready
- ✓ Aligned to NGSS



UPGRADE to the Bundle

Physics 1 Curriculum Bundle

- ✓ Complete Physics 1 Curriculum
- ✓ Google & Distance Learning Ready
- ✓ Engaging, Inquiry-Based Lessons
- ✓ Comprehensive Coverage

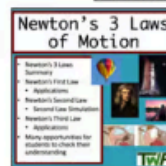


Complete Lessons

Make sure your students are on track

Student copies with blanks

Videos embedded right into your presentations



Interactive and Engaging Activities

- Lab Station Activities
- Digital Scavenger Hunts
- Reading Comprehensions
- Speed Quizzing
- Digital Interactive Notebooks
- Task Card Activities



CLICK HERE



Save 70% and get the FULL Year Curriculum

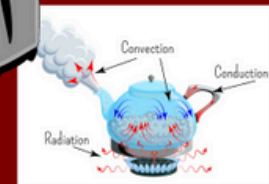
Work, Energy and Power Complete Unit

Includes:

- 3-4 weeks of teaching resources
- 6 Lessons in Office and Google
- 1 Unit Test and Quiz with Answer Key
- 2 Lab Station Activities
- 1 Digital Scavenger Hunt
- 1 Reading Article and Review Activity
- Task Card Review Game

Lessons:

- 1) Energy and its forms
- 2) Work and Energy
- 3) Kinetic and Gravitational Potential Energy
- 4) The Law of Conservation of Energy
- 5) Thermal Energy
- 6) Power



6 Complete Lessons

Energy And Its Forms

- Energy = Life
- Where do we get energy from?
- Types of energy
 - Thermal
 - Electrical
 - Radiant
 - Nuclear
 - Gravitational
 - Kinetic
 - Elastic
 - Sound
 - Chemical
- Energy units
- Energy transformation



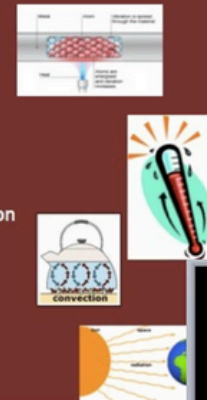
Work and Energy

- Work Done
- $W = Fd$
- Units and Direction
- Positive and Negative Work
- When Work = 0



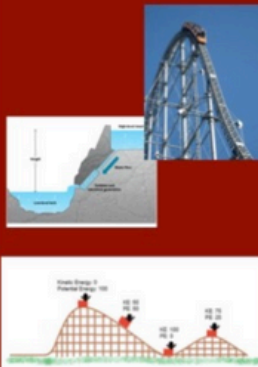
Thermal Energy, Temperature and Heat

- Thermal Energy vs. Temperature vs. Heat
- Heat
- Heat Transfer
- Methods of Heat Transfer
 - Conduction, Convection and Radiation
- Specific Heat Capacity
- The Principle of Heat Exchange



Kinetic & Gravitational Potential Energy

- Mechanical Energy
- Kinetic Energy
- Work-Energy Theorem
- Gravitational Potential Energy
- Energy is Conserved
- Energy Conservation Application
- Summary



The Law of Conservation of Energy and Efficiency

- The Law of Conservation of Energy
- Total Mechanical Energy
- Other Forms of Energy
- Energy Efficiency
- Sports Application



Power

- Power
 - The rate of doing work
- Watts
 - Power Generation Stations
 - Check Your Understanding
- Horsepower



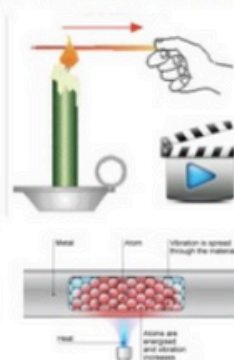
Thank You For Your Interest

Inside the Unit

- 3-4 weeks of teaching material
- 6 lessons
- Office and Google versions of EACH lesson
- Teacher and student versions for each lesson
- Many videos and simulations embedded into the slides
- Student notes in Word and Google Doc

Methods of Heat Transfer - Conduction

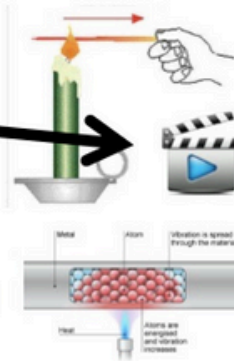
- The transfer of heat through physical contact
- The picture shows how a metal rod is heated by the candle
- Prolonged contact with the flame will increase the temperature and thermal energy of the metal causing it to become very hot



The diagram illustrates heat conduction. A metal rod is held by a hand at one end, while the other end is placed in the flame of a candle. An arrow points from the flame towards the hand, indicating the direction of heat transfer. Below the rod, a cross-section shows particles (atoms) vibrating and passing energy through the material. Labels include 'Heat' at the flame, 'Atoms' within the rod, and 'Vibration is spread through the material'.

Methods of Heat Transfer - Conduction

- _____
- The picture shows how a metal rod is heated by the candle
- Prolonged contact with the flame will increase the temperature and thermal energy of the metal causing it to become very hot

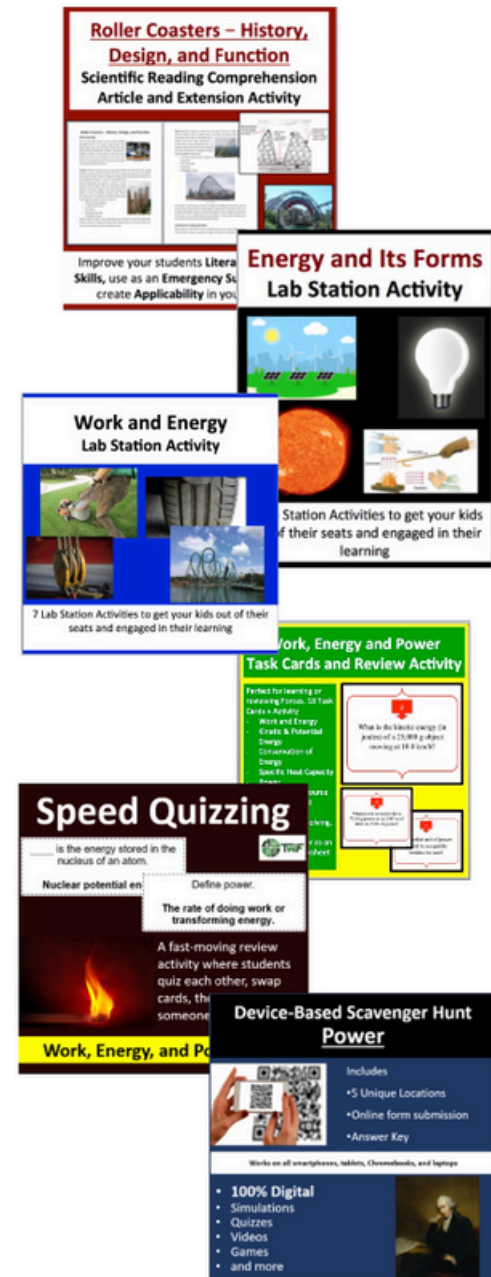


This diagram is identical to the one above, showing a metal rod being heated by a candle flame. It includes the same labels for 'Heat', 'Atoms', and 'Vibration is spread through the material'. A black arrow from the text 'Many videos and simulations embedded into the slides' in the list points to this diagram.

Thank You For Your Interest

Aside from the lessons, the Unit also contains:

- 1 Unit Test and Quiz with Answer Key
- Kinetic Catapult
- Task Card Review Game
- Energy and its Forms - Lab Station Activity
- Work and Energy - Lab Station Activity
- Power - Digital Scavenger Hunt
- Roller Coasters – Reading
- Work Energy and Power - Speed Quizzing



Digital Teaching Schedule

Work, Energy, and Power Day-By-Day

You can access the day-by-day breakdown from the link below

<https://teachsciencewithfergy.com/teaching-work-energy-and-power-my-daily-schedule/>

Thank you for your purchase.

Devon – Teach With Fergy

Day 8:

- Work Period
 - Work, Kinetic and Gravitational Potential Energy Worksheet
 - HW Questions Answered – <https://youtu.be/EW-TivHR0u4>
- Roller Coasters – Reading

Day 9:

- Lesson 4 – Conservation of Energy and Efficiency
 - HW Questions Answered – <https://youtu.be/jhddLsH4eek>
- HW:
 - Complete Questions
 - Study for Quiz – L1-4 next day

Day 10:

- Quiz Lesson 1-4
- Lesson 5 – Thermal Energy (Day 1)
- HW Questions Answered – <https://youtu.be/9IbGvH8kLEg>

Office and Google Versions

- This unit includes both Office and Google formats for ALL resources
- The lessons are in PowerPoint and Google Slides format while all documents contain Word and Google Doc versions
- Your resource is perfect for distance learning and integrates seamlessly with Google Classroom as I've included a link that will automatically create a copy of the resources and put them directly into your Google Drive with one click



**Google Classroom Ready
One-Click Google Slides Access**

Who is it for?

- ✓ High School Science Teachers
- ✓ Teachers using NGSS
- ✓ Teachers who want to increase students' engagement and retention
- ✓ Teachers not looking to reinvent the wheel
- ✓ Teachers who don't want to spend all their time prepping

What You Get

Complete Lessons

- ✓ Make sure your students are on track
- ✓ Each lesson comes with a teacher and student version to keep them focused
- ✓ Lessons come with videos embedded right into your slides

Interactive Activities

- ✓ Lab Station Activity
- ✓ Digital Interactive Notebook
- ✓ Scientific readings





Save yourself
the **STRESS**
and time

Instead, Spend Your Time Wisely



Stimulate Student Interest and Spark Their Curiosity

**Develop Key Communication,
Collaboration, and Problem Solving Skills**



**Incorporate Technology and Increase
Collaboration**