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## PHYSICS UNIT CHECKLIST & KEY TERMS

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### 1. DESCRIBE THE MOTION OF AN OBJECT BASED ON ITS POSITION, DIRECTION, AND SPEED AS IT RELATES TO ANOTHER OBJECT.

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- Motion
- Reference point
- Position
- Direction
- Speed
- Velocity
- Acceleration

### 2. HOW DO YOU GRAPHICALLY REPRESENT THE MOTION OF AN OBJECT? SHOW HOW THE MOTION OF AN OBJECT CHANGES OVER A PERIOD OF TIME.

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- Distance
- Time
- Slope

### 3. HOW CAN YOU INTERPRET DIFFERENT DISTANCE VERSUS TIME GRAPHS?

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- Constant speed
- Variable motion

### 4. HOW DO BALANCED AND UNBALANCED FORCES AFFECT AN OBJECT'S MOTION? DO UNBALANCED FORCES CHANGE AN OBJECT'S MOTION? WHAT TWO EFFECTS DO BALANCED FORCES HAVE ON AN OBJECT'S MOTION? WHAT HAPPENS TO AN OBJECT'S MOTION IF NO FORCES ARE ACTING ON IT?

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- Balanced
- Unbalanced
- Force
- Net Force
- Inertia
- Mass

**5. DOES A FORCE HAVE TO ACT ON AN OBJECT TO CHANGE ITS MOTION?**

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- Gravity
- Friction
- Magnetic
- Air Resistance

**6. WHAT IS THE RELATIONSHIP BETWEEN POTENTIAL AND KINETIC ENERGY?**

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- Potential Energy
- Kinetic Energy
- Mechanical Energy

**7. HOW DOES ENERGY CHANGE FORMS? BE ABLE TO MODEL OR DIAGRAM ENERGY TRANSFORMATIONS.**

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- Energy
- Energy Transformation

**8. EXPLAIN THE DIFFERENT WAYS ENERGY APPEARS, TRAVELS, AND CAN BE TRANSFERRED.**

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- Energy Transfer
- Thermal Energy
- Electrical Energy
- Electromagnetic Energy
- Nuclear Energy
- Chemical Energy
- Green Energy
- Radiant Energy

**9. WHY DO ELECTRICAL CIRCUITS REQUIRE A COMPLETE LOOP TO PASS ELECTRICAL CURRENTS?**

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- Open Circuit
- Closed Circuit
- Parallel Circuit
- Series Circuit

## 10. HOW CAN ENERGY BE TRANSFERRED BETWEEN SYSTEMS THROUGH THE PROCESS OF PUSHING AND PULLING?

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- Work
- Power

## 11. IDENTIFY SIMPLE MACHINES

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- Simple Machine
- Lever
- Pulley
- Inclined Plane
- Screw
- Wheel & axle
- Wedge
- Compound Machine

## 12. HOW DO SIMPLE MACHINES MAKE WORK EASIER BY CHANGING THE SIZE OR DIRECTION OF A FORCE?

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- Mechanical Advantage
- Efficiency

## 13. EXPLAIN THE LAWS OF PHYSICS

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- Newton's 1<sup>st</sup> Law – (Law of Inertia)
- Newton's 2<sup>nd</sup> Law
- Newton's 3<sup>rd</sup> Law
- Constant Acceleration
- Law of Universal Gravitation
- Law of Energy Conservation
- Law of Conservation of Momentum