

# Energy Conversion

Instruction Page – Use your journal to record everything!

What you do:

- Make a T-chart in your journal. One side will be Potential Energy and the other will be Kinetic Energy.
- Spread out the large cards so everyone can see them.
- Individually, write in your T-chart which pictures show each type of energy. When all group members have finished, check your answers for verification.

Potential Energy	Kinetic Energy

- Complete the following sentences in your journal.  
An apple hanging from the branch of a tree has \_\_\_\_\_ energy. Potential energy is \_\_\_\_\_ energy. Potential energy changes to \_\_\_\_\_ energy when the apple starts to fall. Would an apple sitting on the ground have potential energy? (explain why or why not) Kinetic energy is \_\_\_\_\_ energy. Anything in motion has \_\_\_\_\_ energy. Would an apple sitting on the ground have kinetic energy? (explain why or why not)
- Read how to play the Energy Card Game.
- Deal the cards and play.

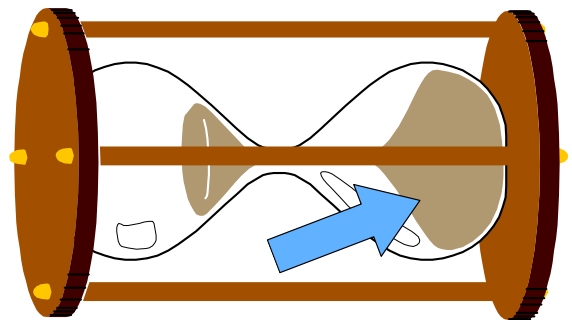
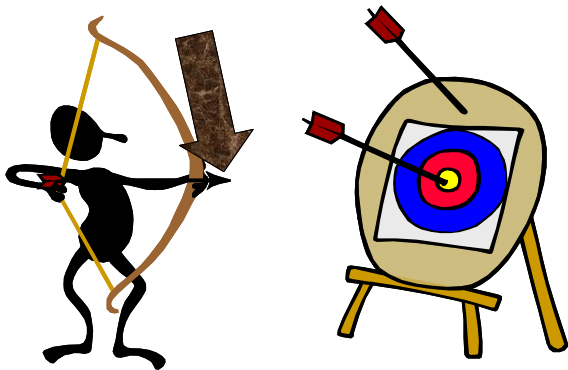
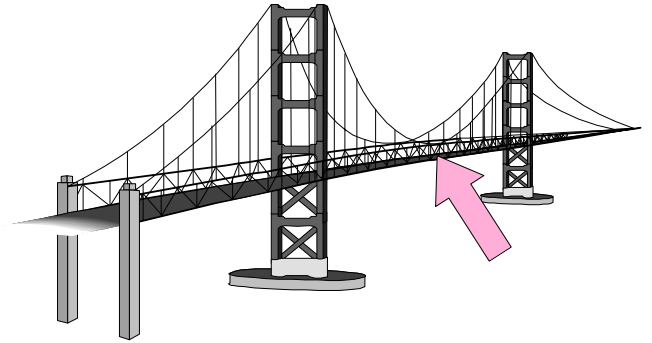
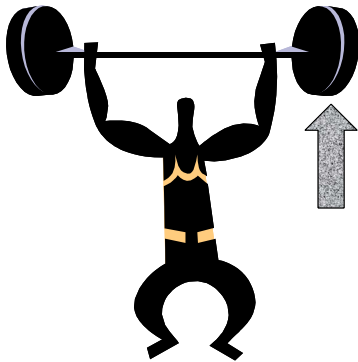
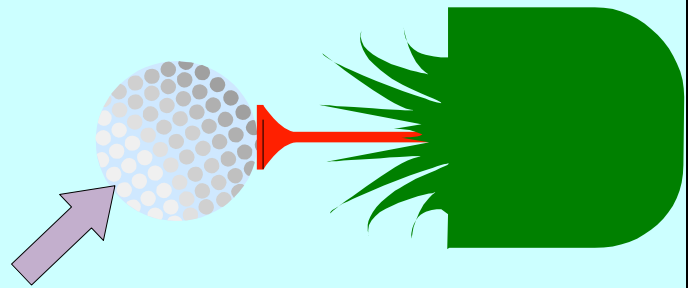
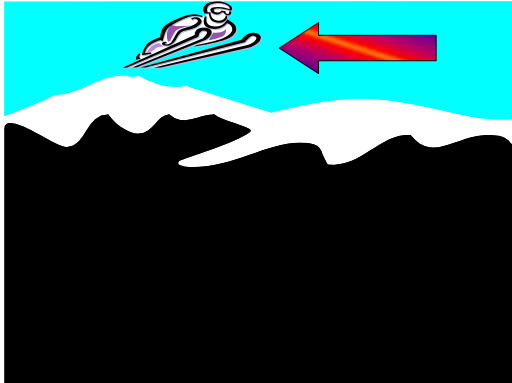
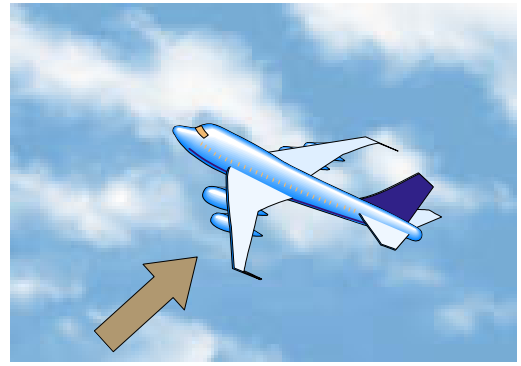
TURN OVER TO FIND WHICH TAKS QUESTIONS  
TO ANSWER IN YOUR TEST BOOKLETS

FROM THE 2006 RELEASED TEST ANSWER:

6  
18  
23  
27  
44  
46

AFTER ANSWERING THE TAKS QUESTIONS:

- TIDY AND REORGANIZE THE STATION MATERIALS
- RETURN THEM
- PICK UP A DIFFERENT SET OF STATION MATERIALS



# Energy Card Game

Number of players: 3-4

Object of the game: 1<sup>st</sup> to get rid of all cards is the winner.

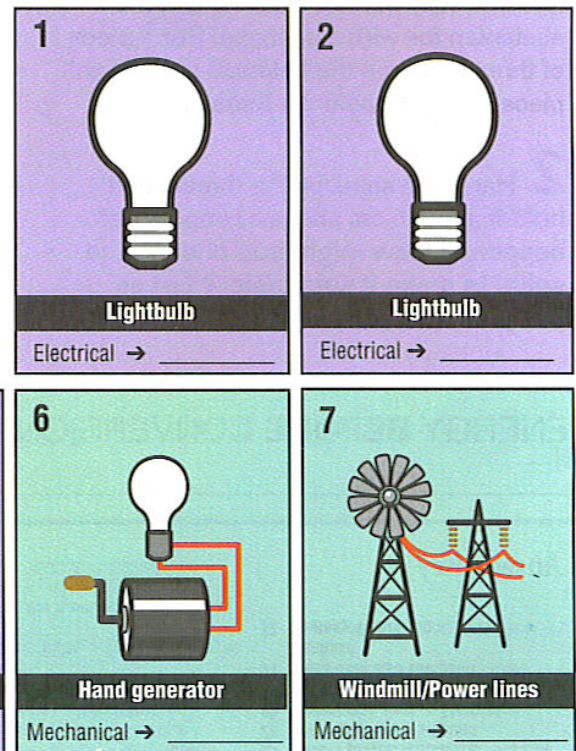
How to play:




Deal out all the cards. Put extras to the side and don't use them.

Cards with CHEMICAL energy on the left side of the arrow are BONUS cards. The Photosynthesis card is a SUPERBONUS card. Players with these cards place them face down in front of them to be added to their score later. This reduces the number of cards in their hands and makes it easier for them to win.

1<sup>st</sup> player plays any card, and names out loud the energy conversion on the left and right sides of the arrow such as "Electrical to Light." 2<sup>nd</sup> player has to play a card that converts "Light" to another form of energy. If player 2 does not have a card they can use, they must pass. Each player in turn tries to make an energy conversion with the cards from their hand. If all players must pass, the 1<sup>st</sup> player who passed may play any card so that play continues.

Scoring: The 1<sup>st</sup> player out of cards gets 5 points plus 1 additional point for each card in the other players' hands. Each player receives 1 point for any bonus card. Whoever has the super bonus card gets to add 5 points to their score.



<p>8</p>  <p><b>Rubbing hands together</b></p> <p>Mechanical → _____</p>	<p>9 <i>BONUS!</i></p>  <p><b>Battery</b></p> <p>Chemical → _____</p>	<p>10</p>  <p><b>Hair dryer</b></p> <p>Electrical → _____</p>	<p>11</p>  <p><b>Hair dryer</b></p> <p>Electrical → _____</p>	<p>12</p>  <p><b>Radio</b></p> <p>Electrical → _____</p>
<p>13</p>  <p><b>Whistle</b></p> <p>Mechanical → _____</p>	<p>14 <i>BONUS!</i></p>  <p><b>Running</b></p> <p>Chemical → _____</p>	<p>15 <i>BONUS!</i></p>  <p><b>Running</b></p> <p>Chemical → _____</p>	<p>16</p>  <p><b>Steam locomotive</b></p> <p>Heat → _____</p>	<p>17 <i>BONUS!</i></p>  <p><b>Rocket</b></p> <p>Chemical → _____</p>
<p>18</p>  <p><b>Rocket</b></p> <p>Heat → _____</p>	<p>19</p>  <p><b>Opera singing</b></p> <p>Sound → _____</p>	<p>20</p>  <p><b>Solar calculator</b></p> <p>Light → _____</p>	<p>21</p>  <p><b>Solar car</b></p> <p>Light → _____</p>	<p>22</p>  <p><b>Lightning</b></p> <p>Electrical → _____</p>
<p>23</p>  <p><b>Lightning</b></p> <p>Electrical → _____</p>	<p>24</p>  <p><b>Plant facing the sun</b></p> <p>Light → _____</p>	<p>25</p>  <p><b>Telephone</b></p> <p>Sound → _____</p>	<p>26</p>  <p><b>Telephone</b></p> <p>Electrical → _____</p>	<p>27</p>  <p><b>Record player</b></p> <p>Mechanical → _____</p>
<p>28</p>  <p><b>Tea kettle</b></p> <p>Heat → _____</p>	<p>29</p>  <p><b>Thermostat</b></p> <p>Heat → _____</p>	<p>30</p>  <p><b>Microphone</b></p> <p>Sound → _____</p>	<p>31</p>  <p><b>Voice-activated computer</b></p> <p>Sound → _____</p>	<p>32 <i>SUPER BONUS!</i></p>  <p><b>Photosynthesis</b></p> <p>Light → Chemical</p>