YOU ARE WHAT YOU EAT EXAMPLES

1. Numerical information called “data” can be useful in our daily lives. A branch of mathematics called “statistics” provides methods for collecting, organizing, and interpreting data. One way to organize data is by using tables.

   Although “data” is plural for “datum,” often today “data” is used for both singular and plural.

   Have students name some data that can be found in newspapers. Sample answers are sports statistics, stock market figures, and temperature charts.

2. Mark and Debbie White are going to buy a new car. They have narrowed their choices down to three cars. A consumer magazine containing information on Model A, Model B, and Model C gives them additional information to consider. The table below contains some basic facts and figures for each model.

<table>
<thead>
<tr>
<th>Dimensions (in.)</th>
<th>Model A</th>
<th>Model B</th>
<th>Model C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front shoulder room</td>
<td>55.5</td>
<td>56.0</td>
<td>56.0</td>
</tr>
<tr>
<td>Maximum front leg room</td>
<td>42.0</td>
<td>41.0</td>
<td>43.0</td>
</tr>
<tr>
<td>Front head room</td>
<td>3.4</td>
<td>3.4</td>
<td>3.4</td>
</tr>
<tr>
<td>Rear shoulder room</td>
<td>55.0</td>
<td>55.5</td>
<td>55.5</td>
</tr>
<tr>
<td>Rear head room</td>
<td>0.5</td>
<td>1.0</td>
<td>2.0</td>
</tr>
</tbody>
</table>

   TABLE - A

   Have students find a statistical chart or graph in a newspaper or magazine. Have them evaluate how the information could have been obtained. Analyze if the chart/graph is clear and if its contents are easy to understand.

3. Example: Which car (from Table A) would give White’s minimum leg room in the front seat?

   Leg room in Model A is 42.0 inches, in Model B is 41.0 inches, and in Model C is 43.0 inches. Therefore, Model B would provide the least amount of leg room in the front seat.
4. Which car (from Table A) would give the White's maximum back-seat room for their children?

Comparing the rear shoulder room, both Model B and Model C provide the most room, 55.5 inches, while Model A has 55.0 inches. Comparing the rear head room, Model A has 0.5 inch, Model B has 1.0 inch, and Model C has 2.0 inches. Model C provides the most rear head room.

Therefore, Model C provides the most room in the back seat.

5. Statistical data, as in Table A, can be collected by actually measuring cars. Data may be collected when they occur, such as keeping score at a volleyball game. Conducting surveys or polls may also collect data. When you study and analyze data to draw conclusions, it is important to know how the data were collected.

<table>
<thead>
<tr>
<th>Fuel Economy (mpg)</th>
<th>Model A</th>
<th>Model B</th>
<th>Model C</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPA estimates, city/highway</td>
<td>19/29</td>
<td>18/26</td>
<td>19/24</td>
</tr>
<tr>
<td>195-mile trip</td>
<td>29</td>
<td>27</td>
<td>25</td>
</tr>
<tr>
<td>City driving</td>
<td>17</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>Expressway driving</td>
<td>35</td>
<td>30</td>
<td>28</td>
</tr>
</tbody>
</table>

6. Example: Mark travels extensively in his job. Most of his driving is expressway driving. Which car provides the best results with fuel economy for his type of driving? (Use Table B).

Model A reports 35 MPG, Model B reports 30 MPG, and Model C reports 28 MPG.

Therefore, Model A would be the better choice for Mark.

7. Example: Which car has the least miles per gallon average for overall performance? (Use Table B).

Model C reports 24 MPG for EPA estimates city/highway, Model C reports 25 MPG for 195-mile trip, Model C reports 14 MPG for City driving, and Model C reports 28 MPG for Expressway driving. Model C was the lowest in all categories. Therefore, Model C reports the least miles per gallon average for overall performance.
The following table lists the nutritional value found in food items purchased at some fast food restaurants.

<table>
<thead>
<tr>
<th>Item</th>
<th>Calories</th>
<th>Protein (g)</th>
<th>Carbohydrates (g)</th>
<th>Fats (g)</th>
<th>Sodium (mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>McDonalds’ Big Mac</td>
<td>541</td>
<td>26</td>
<td>39</td>
<td>31</td>
<td>962</td>
</tr>
<tr>
<td>Burger Kind Whopper</td>
<td>606</td>
<td>29</td>
<td>51</td>
<td>32</td>
<td>909</td>
</tr>
<tr>
<td>Burger Chef Hamburger</td>
<td>258</td>
<td>11</td>
<td>24</td>
<td>13</td>
<td>393</td>
</tr>
<tr>
<td>Pizza Hut Thin’N Crispy Cheese Pizza (1/2 of 10-in. pie)</td>
<td>450</td>
<td>25</td>
<td>54</td>
<td>15</td>
<td>NA</td>
</tr>
<tr>
<td>Pizza Hut Thick”N Chewy Pepperoni Pizza (1/2 of 10-in. pie)</td>
<td>560</td>
<td>31</td>
<td>68</td>
<td>18</td>
<td>NA</td>
</tr>
<tr>
<td>Arthur Treacher’s Fish Sandwich</td>
<td>440</td>
<td>16</td>
<td>68</td>
<td>18</td>
<td>836</td>
</tr>
<tr>
<td>Burger King Whaler</td>
<td>486</td>
<td>18</td>
<td>64</td>
<td>46</td>
<td>735</td>
</tr>
<tr>
<td>McDonald’s Filet-O-Fish</td>
<td>402</td>
<td>15</td>
<td>34</td>
<td>23</td>
<td>709</td>
</tr>
<tr>
<td>Long John Silver’s Fish (2 pieces)</td>
<td>318</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>NA</td>
</tr>
<tr>
<td>Kentucky Fried Chicken Original Dinner (3 pieces chicken)</td>
<td>830</td>
<td>52</td>
<td>56</td>
<td>46</td>
<td>2285</td>
</tr>
<tr>
<td>Kentucky Fried Chicken Extra Crispy Dinner (3 pieces chicken)</td>
<td>950</td>
<td>52</td>
<td>63</td>
<td>54</td>
<td>1915</td>
</tr>
</tbody>
</table>
1. Which hamburger is highest in protein?

2. Which item is lowest in fat content?

3. If you were on a 1000-calorie-a-day diet and had already eaten 560 calories, what options do you have for one more item? Explain your reasoning.

4. If you were on a low sodium (salt) diet, what food should you avoid? Explain your reasoning.

5. According to the table, is it true that items higher in calories are higher in protein? Explain your reasoning.

6. According to the table, is it true that foods that have a high carbohydrate content care also high in fat content? Explain your reasoning.
YOU ARE WHAT YOU EAT WORKSHEET KEY

1. Which hamburger is highest in protein? ➔ Burger King Whopper

2. Which item is lowest in fat content? ➔ Burger Chef Hamburger

3. If you were on a 1000-calorie-a-day diet and had already eaten 560 calories, what options do you have for one more item? ➔ Possible answers are Burger Chef Hamburger, Arthur Treacher’s Fish Sandwich, McDonald’s Fillet-O-Fish, or Long John Silver’s Fish.

4. If you were on a low sodium (salt) diet, what food should you avoid? ➔ Kentucky Fried Chicken

5. According to the table, is it true that items higher in calories are higher in protein? ➔ There appears to be a high correlation between calories and protein

6. According to the table, is it true that foods that have a high carbohydrate content care also high in fat content? ➔ No, see Pizza Hut Pizza and Arthur Treacher’s Fish Sandwich.
YOU ARE WHAT YOU EAT CHECKLIST

1. Did the student choose the hamburger that is highest in protein?
   a. Yes (20 points)
   b. No, but did choose hamburger that is high in protein (15 points)
   c. No, but did choose a food type that is high in protein (10 points)
   d. No, but did choose hamburger with lower protein (5 points)

2. Did the student choose item with the lowest fat content?
   a. Yes (20 points)
   b. No, but did choose item that is low in fat content (15 points)
   c. No, but did choose item based on fat content (10 points)
   d. No, but did choose item based on some type of criteria (5 points)

3. Did the student choose a correct item based on the following criteria: “If you were on a 1000-calorie-a-day diet and had already eaten 560 calories, what options do you have for one more item?”
   a. Yes (20 points)
   b. No, the item chosen totaled slightly more than 1000 calories (15 points)
   c. No, the item chosen totaled well over the 1000 calorie mark but student did perform correct calculations for determining needed calories (10 points)
   d. No, the student did choose an item did not perform correct calculations for determining needed calories (5 points)

4. Did the student choose correct foot to avoid for a low sodium diet?
   a. Yes and described why (20 points)
   b. Yes but did not describe why (15 points)
   c. No, but did give logical reason for their choice (10 points)
   d. No, but did give a reason for their choice (5 points)

5. Did the student give a correct response to the following: “According to the table, is it true that items higher in calories are higher in protein? Explain your reasoning.”
   a. Yes and described why (20 points)
   b. Yes but did not describe why (15 points)
   c. No, but did give logical reason for their choice (10 points)
   d. No, but did give a reason for their choice (5 points)
6. Did the student answer the following: “According to the table, is it true that foods that have a high carbohydrate content care also high in fat content? Explain your reasoning.”

a. Yes and described why (20 points)
   b. Yes but did not describe why (15 points)
   c. No, but did give logical reason for their choice (10 points)
   d. No, but did give a reason for their choice (5 points)

Total Number of Points _________

A 108 points and above
B 96 points and above
C 84 points and above
D 72 points and above
F 71 points and below

Any score below C needs remediation!