

Problem Solving: Terms

Part A.

Read the following terms and their definitions.

Creativity—the ability to think of new ideas in original ways

Feature—characteristic of an object

Flexibility—the ability to change to new ways of thinking

Function—the way an object is used

Functional fixedness—the inability to think of unusual uses for an object

Overcomplication—thinking only of complex possibilities when a simple solution is needed

Oversimplification—thinking only of simple possibilities when a complex solution is needed

Problem solving—the process of thinking about a difficult situation until the difficulty is resolved

Recombination—mentally rearranging parts of a previous problem to solve a new problem

Rigidity—the inability to change to new ways of thinking

Set—a tendency to think about a new problem the same way as a previous problem

Strategy—a plan used to solve a problem

Part B.

In the following selection, numbers are placed where one of the terms from part A is described. On a separate page, write the number and the term that applies. Some terms may be used more than once.

Crisis at Hamburger Heaven!

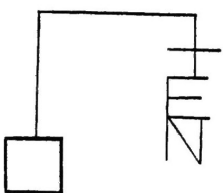
Everyone needs to develop problem-solving abilities in order to be successful in future careers. Employers appreciate workers who can think of new ideas in original ways (1). They expect employees to solve problems in various situations by thinking about what happened in the past and rearranging ideas to solve the new problem (2). It is frustrating to see employees who can't change the way they think, in general (3), or who always try to solve a specific problem the same way it's always been done in the past (4).

For example, a potato blight halted deliveries to the area's Hamburger Heaven restaurants. Without french fries, sales were going to go down. The frying machines would be unused until the next potato crop was harvested. The manager asked the employees to think of a plan to keep sales from going down (5).

Most of the employees told the manager to do the same things Hamburger Heaven had always done in specific situations when sales had gone down in the past (6). They also either told the manager very easy solutions, such as "Put everything on sale!" (7), or very complex solutions, including buying more equipment (8).

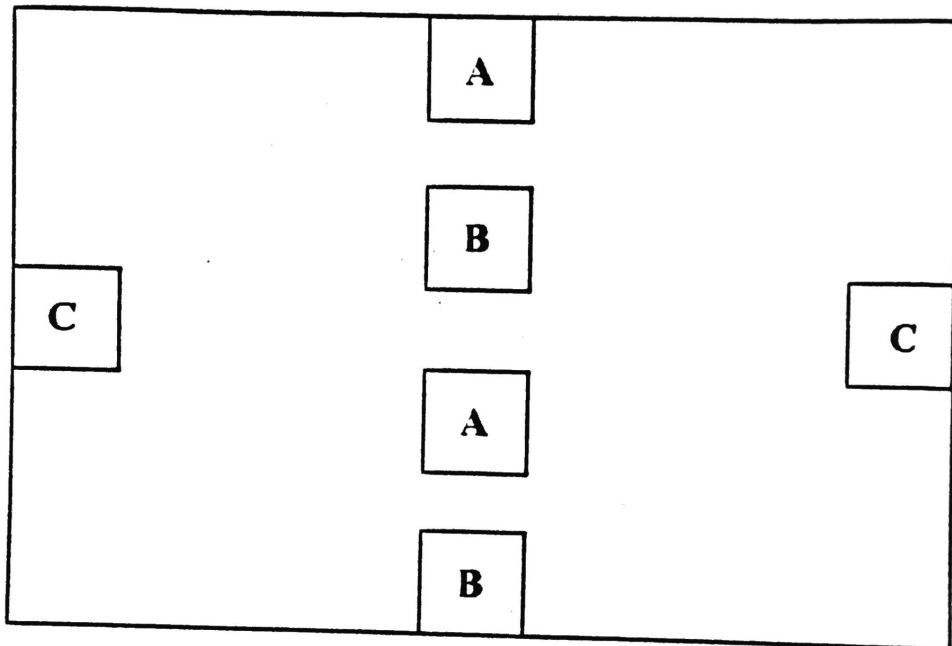
A new employee, Jennifer, thought the manager could try doing something different and new (9) without spending too much money. She learned the characteristics (10) of the frying machines that would have been used (11) to cook the potatoes. She did not feel that Hamburger Heaven had to be trapped into using the machines only to fry french fries (12). It could be used to fry other things that might sell even better than french fries! In her area, a fried pastry called a funnel cake was popular at fundraisers. It was made of a sweet, thin dough (requiring no potatoes), which was poured into hot oil to cook just like french fries. She had thought of a plan (13) by thinking about a situation in her past (selling baked goods in order to raise money), and using parts of the former idea to help Hamburger Heaven in this new situation (14). Her employer was pleased with the way she thought about a difficult situation and found a helpful solution (15). People in the area bought lots of funnel cakes, so the manager gave Jennifer a promotion and a raise.

Creative Thinking

1 <div>sand</div>	2 <div>Man Board</div>	3 <div>Stand I</div>	4 <div>iiiiiiiiiiiiii OOOO</div>
5 <div>wear long</div>	6 <div>r roads a d s</div>	7 <div>0 M.D. Ph.D B.S</div>	8 <div>T O W N</div>
9 <div>ground feet feet feet feet feet feet</div>	10 <div>chair</div>	11 <div>W E L y A R</div>	12 <div>EVERYRIGHTTHING</div>
13 <div>G.I C C C C C C C C C C</div>	14 <div>handed something</div>	15 <div>NIGHTFLY</div>	16 <div>CYCLE CYCLE CYCLE</div>
17 <div>often not often not often</div>	18 <div>gene ration</div>	19 <div>ecnalg</div>	20 <div>f r r i i e e n n d d s standing mis f r r i i e e n n d d s</div>
21 <div>dice dice</div>	22 <div>he's himself</div>	23 <div>the plot</div>	24 <div>j u you me s t</div>
25 <div>engage ment</div>	26 <div></div>	27 <div>London Bridge</div>	28 <div>knee Lights</div>

PARTICIPATORY LEARNING (continued)
.....**Problem Solving**

Using three separate lines, connect A to A, B to B, and C to C. None of the lines can intersect each other or touch the outside boundary in any way. Don't let your pen touch the paper until you have figured it out.



INTRODUCTORY ACTIVITY (continued)

Be Creative

What do the following illustrations look like?

