Ideation Worksheet Answers

What is the definition of ideation? The process of forming ideas

What are the three stages of a thought cycle? innovation, development, actualization

What are the two phases of creative problem solving? divergent thinking (ideation) and convergent thinking (idea analysis and evaluation)

What is the purpose of ideation? To generate as many ideas as possible in as condensed a timeframe as possible

What is the most popular ideation technique? Brainstorming

Describe several components for successful ideation:
• A well-defined problem, a mix of people from different disciplines, a subject matter expert,
• The exchange of ideas to generate more ideas, no criticism or judgments allowed, a facilitator to draw each idea out,
• No ideas are filtered out by the session facilitator – all are captured as presented, typically on a flip chart.

What is metaphorical thinking? Applying ideas from one context to another

What is bisociation? Creating connections for two previously unconnected items

What is free association? Saying the first thing that comes to mind.

What is homospatial thinking? Conceiving of two unrelated entities occupying the same space

What is incubation? Walking away from the problem after intensely thinking about it

List some other ideation techniques: Sketching and doodling, diagram relationships, list attributes, visualization, guided imagery, question the problem and its assumptions

What is an inventive problem? One with no known solution

Why are inventive problems difficult to solve? They often have contradictory requirements

What is psychological inertia? Only considering solutions from ones’ own experience

How does an engineer want to solve a problem? By applying mathematics or being analytical
What is one of the key elements of problem solving? Creativity

What is the conceptual process of ideation? The exchange of ideas in order to generate more ideas

Define the following:
- **Invention**: A new method, idea or device that did not exist before
- **Innovation**: A new way of doing something, an improvement on an existing form, composition or processes. Not just better but different in a significant way
- **Improvement**: To become better. To make more useful, profitable, or valuable

What are the differences between invention, innovation, and improvement? An invention is something brand new, but because it has not existed before may not be widely accepted or used. Innovation can be something new or better, but in a way that is more accepted to change the way people act or do things. An improvement is a better way of doing things that is not significant enough to be called an innovation.

What is meant by teamwork? The process of working collaboratively with a group of people, in order to achieve a goal.

What is a cross functional team? A group of people with different functional expertise working toward a common goal, such as with marketing, engineering, sales, and human resources working toward a common goal

What is collaboration? To work together, especially in a joint intellectual effort, to produce benefits greater than those that can be achieved by individual effort

What is meant by actualization? Making the product real