

# **Motion Tri-Mind**

**A Ronnster-0'Haranator Production**

# I like...

- \* Designing new things
- \* Coming up with ideas
- \* Using my imagination
- \* Thinking of alternative solutions
- \* Noticing things people tend to ignore
- \* Thinking in pictures & images
- \* Inventing
- \* Supposing things were different
- \* Acting & role playing

# #1

# I like...

- \* Analyzing situations.
- \* Comparing and contrasting ideas.
- \* Critiquing my own work & the work of others.
- \* Thinking clearly & analytically.
- \* Appealing to logic.
- \* Explaining difficult problems to others.
- \* Making inferences & deriving conclusions
- \* Sorting & classifying
- \* Thinking about things

# #2

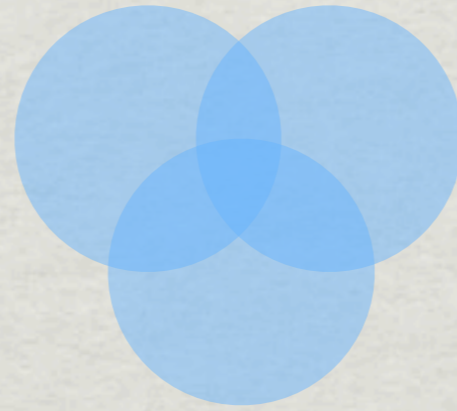
# I like...

- \* Taking things apart and fixing them.
- \* Learning through hands-on activities.
- \* Making & maintaining friends.
- \* Understanding & working with others.
- \* Resolving conflicts.
- \* Convincing someone to do something.
- \* Applying my knowledge.
- \* Working & learning with others.
- \* Putting into practice what I've learned

# #3

Group yourselves  
according to current  
state of mind.

# Tri-Mind



## Sternberg's Triarchic model of intelligence

### \* 1-Creative

- \* Ability to create new ideas and react to new situations
- \* Ability to connect ideas in novel ways

### \* 2-Analytical

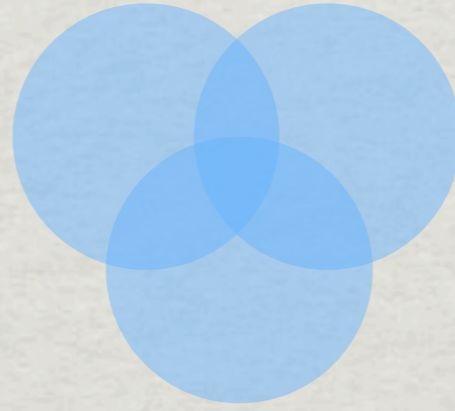
- \* Ability to analyze and evaluate own ideas and those of others
- \* Ability to explain why something works the way it does

### \* 3-Practical

- \* Ability to grasp and solve problems in real life situations
- \* Ability to take an idea and make it into a practical reality

Find a like-minded  
partner and Mr.  
Ronneberg will give you  
a task...

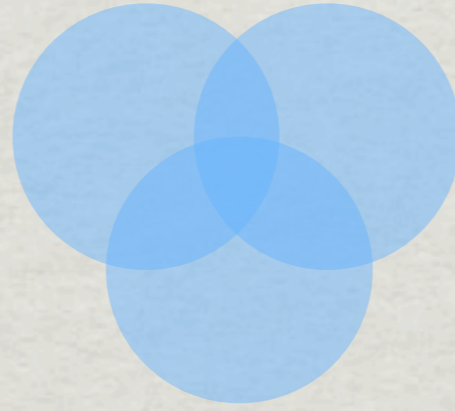
# 1-Creative



To illustrate the concepts of velocity and acceleration...

- \* Create a Flip book which:
  - \* illustrates the big ideas of velocity and acceleration
  - \* has an interesting plot
  - \* includes all possible combinations of positive, negative, and zero velocity and acceleration
  - \* includes “subtitles” which explain what is going on in terms of  $v$  and  $a$
  - \* Your Audience: Anyone could pick this up of my coffee table and understand what was going on.
- \* Products to turn in:
  - \* 1-rough draft: sketches of story line, don't include every page, just outline ideas.  
Due:\_\_\_\_\_
  - \* 2-final draft: neatly drawn, easy to flip, easy to understand.  
Due:\_\_\_\_\_
  - \* 3- one page reflection which includes: time spent on each part, what you learned in the process, things that were challenging  
Due:\_\_\_\_\_
- \* Possibility for extra credit:
  - \* Turn this flip book into a stop-motion video.
  - \* Present your video to the class.

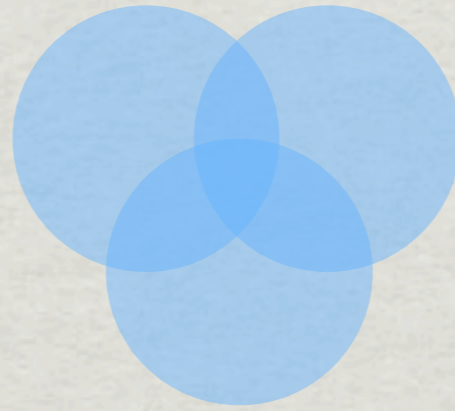
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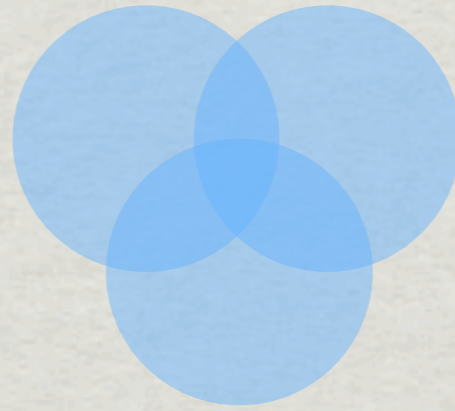
# 2-Analytical



To illustrate the concepts of velocity and acceleration...

- \* Create a lesson plan which:
  - \* illustrates the big ideas of velocity and acceleration
  - \* Is age appropriate
  - \* includes all possible combinations of positive, negative, and zero velocity and acceleration
  - \* includes a way of assessing whether students understand
  - \* Your Audience: a 3-5th grade class of 20 students.
- \* Products to turn in:
  - \* 1-rough draft: big ideas you want kids to understand, ideas for activities, rough timeline, ideas for assessment  
Due:\_\_\_\_\_
  - \* 2-final draft: detailed lesson plan including big ideas, a timeline, explanation of each activity, things to say/ask, assessment tool  
Due:\_\_\_\_\_
  - \* 3- one page reflection which includes: time spent on each part, what you learned in the process, things that were challenging  
Due:\_\_\_\_\_
- \* Possibility for extra credit:
  - \* Teach your lesson to a class of middle-schoolers! (Mr. Ronneberg can help you set this up)
  - \* Adapt your lesson plan into an instructional video and show it to the class.

# 3-Practical



To illustrate the concepts of velocity and acceleration...

- \* Design a speedometer which:
  - \* can attach to a bike or skateboard
  - \* includes detailed technical drawings with dimensions and necessary specification notes
  - \* can determine how fast the bike/board is moving as well as whether it is accelerating
  - \* a written explanation of how the speedometer works, which also explains the big ideas of velocity and acceleration.
  - \* can be manufactured economically
  - \* Your Audience: Investment Bankers, who are deciding whether to invest in your product.
- \* Products to turn in:
  - \* 1-rough draft: rough sketches of design and explanation of how it will work.  
Due:\_\_\_\_\_
  - \* 2-final draft: detailed drawings with dimensions, notes, and detailed explanation.  
Due:\_\_\_\_\_
  - \* 3- one page reflection which includes: time spent on each part, what you learned in the process, things that were challenging  
Due:\_\_\_\_\_
- \* Possibility for extra credit:
  - \* Create a “Proof of Concept” Prototype which you can demonstrate for the class.