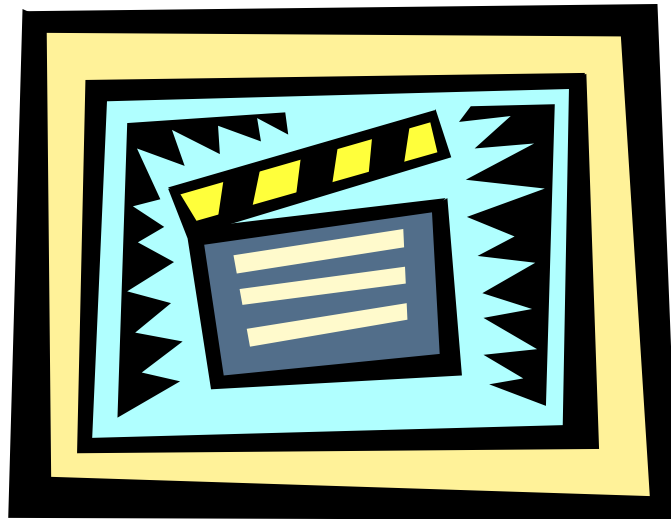
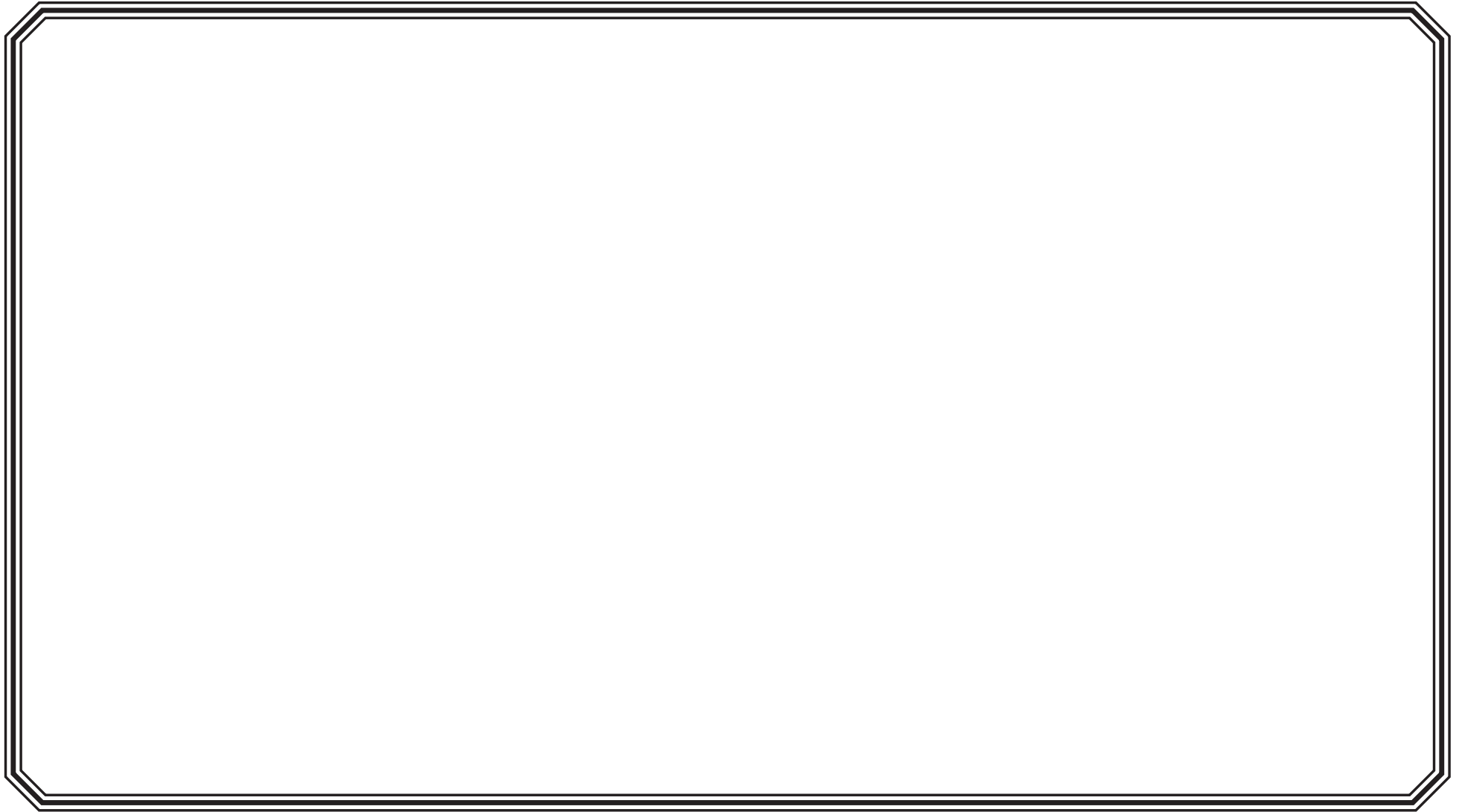


Action-based Problem Solving Junior/Middle Divisions

STUDENT ACTION BOOKLET



Step 1: Accepting the Challenge ... brainstorming areas of concern



JOT BOARD

Place the *jot board* in the *middle of the group*. All group members should write their ideas on the *jot board* - even upside down and sideways. Identify as many problems possible by *jotting* them down on the *jot board*. Simple phrases, words, symbols or drawings are fine. Include all ideas, even *wild* and *crazy* ones, on the *jot board*. **Circle** the five or six problems your team thinks present the biggest challenges.

Step 1, Part 2: Incubating and Elaborating the Challenges

... creating the "IF ... THEN" Challenge Statements (Optional for juniors)

Think about the five or six problems circled on your *jot board*. Tell more about them by explaining ***what*** the problem is and ***why*** it is a challenge. Think about the ***causes*** and ***effects*** of each problem. If this happens, then this may result. Remember to use *may*, *might* or *could* rather than *can*, *will* or *would*.

Fill-in-the-blank "examples" for challenge statements are listed below. You may use a similar format when elaborating on your circled ideas.

1. ***If*** (explain what you think the problem is), ***then*** (explain what you think might happen).
2. ***If*** _____ continues, ***then*** _____ may increase (decrease).
3. ***If*** there are problems with _____, ***then*** _____ (explain what might result) _____.

List your challenge statements on the numbered lines below.

1.

2.

3.

4.

5.

6.

Step 2: Identifying the Underlying Challenge
... recognizing and stating the most significant problem

Look back at the problems **circled** on your Step 1 *jot board*. Identify which challenge, if overcome, would have the greatest impact on this specific situation. The problem you choose will become the basis for your underlying challenge. Look at your **circled** ideas and discuss the following questions before selecting the underlying challenge.

*Which problem, if overcome, would have the greatest **impact** on the fuzzy challenge?*

*Which problem or challenge can we have the most **influence** on because of our understanding or knowledge of the problem or people involved?*

*Which problem or challenge generates the most **interest** and **enthusiasm** among our team?*

*Which problem seems to inspire our **imagination**s the most, so we are more likely to come up with creative ideas to overcome the challenge?*

The underlying challenge should be written as a question using a format similar to the one below:

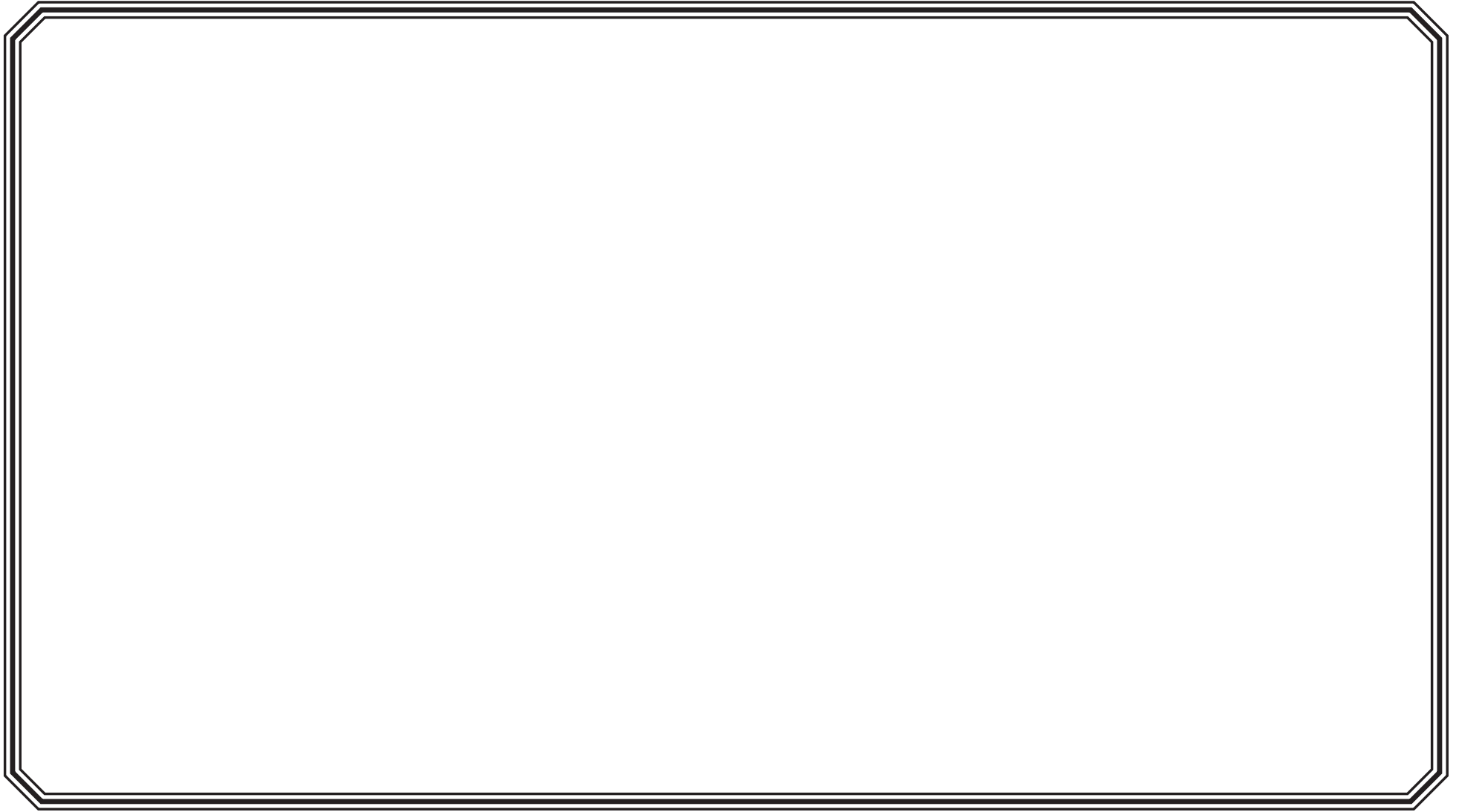
In what ways might we, the (team name - optional), (one key verb phrase which indicates the action you will take) ***so that*** (the goal, purpose or desired outcome) ?

Avoid absolute verbs such as *prevent*, *eliminate* or *stop* as it is nearly impossible to create solutions that totally “prevent” something from happening. Only use *one* verb in the verb phrase so the action the team takes is clearly understood.

Write the underlying challenge decided upon by the team in the box below.

In what ways might we

Step 3: Producing the Action ... brainstorming the action



JOT BOARD

Place the *jot board* in the *middle of the group*. Brainstorm as many different ways as you can think of to overcome the underlying challenge identified by your team in Step 2. Include all ideas for action, even *wild* and *crazy* ones, on the *jot board*. **Circle** ten action ideas your team thinks are the most promising.

Step 3, Part 2: Incubating and Elaborating the Action Ideas

...creating the action statements (Optional for juniors)

Think about the **ten** action ideas you circled on your *jot board*. Pick **six to ten** of the **circled** ideas. Elaborate on your choices to explain **what** the idea is, **who** will put your idea into action and **how** or **why** it will overcome the underlying challenge. Write your solution ideas as positive statements of the action to be taken using *will* or *would*.

A fill-in-the-blank “example” for action statements is found below. You may want to use a similar format when expanding on your action ideas to create elaborated action statements.

_____ {**Who** - person, group, business, type of technology} _____ will _____ {**what** will be done to overcome the underlying challenge} _____ so that _____ {**why** it needs to be done or **how** it will solve this problem} _____.

List your action statements on the numbered lines below.

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

Step 4: Weighing the Action Ideas

List the ten action ideas **circled** on the numbered lines. Select four phrases from the box below and list each across the top of the grid. Think about the action ideas. Decide how well each idea fits each criterion. Rank the ideas on a scale from 1-10.

Criteria Examples:

Which action idea will...

- ...be the most useful?*
- ...be the safest to implement?*
- ...be the least harmful?*
- ...be the easiest to keep going?*
- ...cause the least amount of hassle?*
- ...be the most honorable?*
- ...be the longest lasting?*
- ...be the most acceptable to those in charge?*
- ...be the most acceptable to those involved?*
- ...cost the least to put into operation?*

1 = worst idea
10 = best idea

Criteria

Write your top 10 ideas below.

					TOTAL	
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						

Total the points for each action idea and note the score in the total box. Put a check mark in the last column next to two, three or four ideas which scored the highest in the total column, these ideas have the most potential for overall success.

Step 5: Creating the Plan of Action

Look at your highest ranked action ideas. Combine those that would work well together and elaborate on them to create the plan of action. Explain what it is you will do to solve the underlying challenge (page 3). Be specific, listing names, tasks and dates when you can.

What action will be taken? (Use the ideas with a check mark.)

Who will take the action? (Your group or someone else?)

How and to whom will you present your plan?

Why is this action important? (What difference will it make?)
