# Can't Judge a Powder

2022 New Mexico Coaches' Clinic Rio Sessions

## **Event Setup**

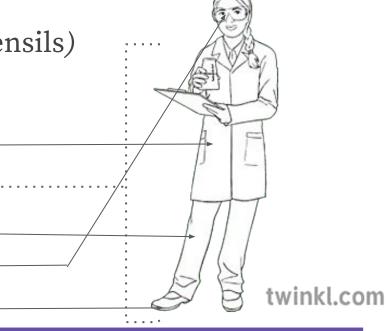
#### What to bring:

Lab kit from page 69 in the rules Nothing else (including writing utensils)

#### Safety

Lab Coats/Aprons \_\_\_\_\_\_ Skin covered from neck down .....

- Loose-fitting pants \_\_\_\_
- Goggles
- Closed-Toed Shoes \_\_\_\_\_



### **Event Setup**

#### At the start of the event, teams will be provided

One powder Pen(cil)s of one color 1M NaOH & HCl Distilled water for washing Waste container(s) An observations sheet Any other  $\Rightarrow$  fancy  $\Rightarrow$  equipment for extra tests Part 1: Objectives

## Make as many useful observations about this one powder as you can.

#### Observations, not inferences.

In Part 2, you'll use these to answer questions, so be ready!

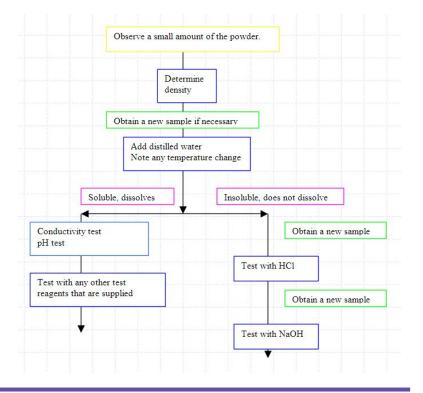
#### Part 1 Demo

## Part 1: Tips

- Your team's observation has to be better quality than ALL the other teams in the room.
  - The best observations at regionals may only be three-pointers at state.
- OBSERVATIONS, not inferences.
- Practice, practice, practice!
  - Your team decides the observations! Nobody says what to do.
  - Know what you need to look for to answer various questions.
  - Internet/videos: great for learning how to do some powder tests

#### **2004 Observation Flowchart**

This probably doesn't cover everything you'll need, but is somewhere to start.



### **Transitioning from Part 1 to Part 2!**

After 25-35 minutes, Part 1 will end.

Lab equipment set aside
Color 1 pen(cil)s collected
All chemicals (including sample) collected

Only the team's observation sheet should be left.

Question sheet distributed.
New color pen(cil)s distributed

Part 2: Objectives

#### Answer questions using observations from Part 1.

Put the relevant observation number(s)

You do NOT need to answer the question.

Part 2 Demo

## Scoring

Each question is worth 5 points.

- High quality data and observations will be worth 5 points.
  - Higher quality observations correspond to more points.
  - Compared to other teams
- Inferences are worth at most 3 points, likely less.
- Answers with no supporting data are worth no more than 2 points.

Remember to clean up! Not worth the 10% penalty...

## **Things to Remember**

- Better observations than everyone around you.
- <u>Observations</u> are the most important thing.
  - NOT identifying the powder
  - NOT giving the correct answer to the question
- Practice with practice tests!
  - Be surprised by questions you can't answer ASAP
  - Get to where you can work very quickly
  - Get familiar with the event
- Make sure you have everything you need and nothing more.
- Time goes faster than you think...

#### **Resources!**

Official 2023 CJAP Event Page

• <u>https://www.soinc.org/cant-judge-powder-b</u>

2004 Event Presentation (VERY outdated, but good info)

 <u>https://scioly.org/wiki/images/7/73/Cant\_Judge\_A\_powder\_Co</u> <u>aches\_Clinic.pdf</u>

Dated National Event Supervisor's Site (on Web Archive)

 <u>https://web.archive.org/web/20130918195946/http://mypage.i</u> <u>u.edu/~lwoz/socrime/index.htm</u>

#### More Resources!

Science Olympiad Student Center Wiki Page

• <u>https://scioly.org/wiki/index.php/Can%27t\_Judge\_A\_Powder</u>

Old Sample Tests (slightly different rules)

<u>https://scioly.org/wiki/index.php/Test\_Exchange\_Archive#Ca</u>
<u>n.27t\_Iudge\_A\_Powder</u>

2023 Sample Tests (biggest collection of scioly exams)

• <u>https://scioly.org/wiki/index.php/2023\_Test\_Exchange</u>