Bikini Bottom Olympics
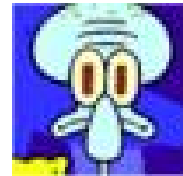**Skill: Best Value and Uncertainty**

Name _____

1) Patrick wants to run the mile in the Bikini Bottom Olympics. He must have a best value (average) between the coach's range of uncertainty. The range to be accepted is 6.0 min to 7.3 min. Patrick ran 3 different times with scores of 6.8 min., 7.6 min., & 7.5 min. Does Patrick get to be on the team?

   a) Find Patrick's best value. (average of his 3 scores)

   b) Find Patrick's uncertainty((Highest Value – Lowest Value) ÷ 2)

   c) Compare Patrick's result to the coach's range. Does his score fall between the 2 numbers?

2) There are 4 long jump athletes already on the Bikini Bottom Olympics team. Squidword wants to be the fifth. The only way he can do that is to have his jump fall in the range of uncertainty of the other 4 jumpers' scores.

Jumper 1	6.2 ft
Jumper 2	7.3 ft
Jumper 3	7.0 ft
Jumper 4	6.1 ft

   a) Find the best value (average the scores together) of the jumpers' scores.

   b) Find the uncertainty of their scores. [(HV-LV) ÷ 2]

   c) Find the range of uncertainty for the jumpers' scores.
       (Best Value – Uncertainty) to (Best Value + Uncertainty)

Now that he has the range, Squidword can see what range his jump must fall between.

3) Sandy the Squirrel loves to ice skate. She has been practicing her figure skating routines. She tries out for the team but the coach won't let her skate until she can show him a range of her scores. If her range is high enough her will let her be on the team.

Score 1	9.2
Score 2	8.4
Score 3	8.9
Score 4	9.5

   a) Find Sandy's best value.

   b) Find the uncertainty of her scores.

   c) Find her range of uncertainty. (Best Value – Uncertainty) to (Best Value + Uncertainty)

If Sandy's top range number falls between 9.2 to 9.9 Sandy will get to be on the team. Does Sandy get to go to the Olympics?

4) Gary the Snail is an excellent diver. Gary's scores usually have a range of uncertainty of .30 to .60. His latest round of dives were scored as follows: 9.2, 8.9, 9.9. Figure out the uncertainty of his latest scores. Does his uncertainty fall within his normal range?