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| **Formulating Questions** | | | |
| Makes statements that don’t generate answers  “I like to go swimming when it is hot outside.” | Formulates questions to learn about people (no response options)  “What do you do most often when it is very hot outside?” | Formulates questions to learn about people (incomplete response options)  “What do you do most often when it is very hot outside: swim, find shade, turn up AC, drink water?” | Formulates clear questions with complete response options to collect relevant data  What do you do most often when it is very hot outside: swim, find shade, turn up AC, drink water, other?” |
| **Observations/Documentation** | | | |
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| **Collecting and Interpreting Data** | | | |
| Uses knowledge of first-hand and second-hand data to decide on method of collection  “To find the number of glasses of water my classmates drink a day, I will ask a survey question. To find the population of different cities in Alberta, I will use the Internet.” | Predicts answers to inform research or how question is asked  “I know I drink about 4 glasses of water a day. So, I will add numbers that are a little less than and a little more than 4 as possible responses.  How many glasses of water do you drink a day? 3, 4, 5, more than 5” | Uses various resources and tools to collect data  “How many glasses of water do you drink a day? 3, 4, 5, more than 5” 3 glasses: 3 students  4 glasses: 6 students  5 glasses: 4 students  More than 5 glasses: 2 students  Population of some cities in Alberta:  Grand Prairie: about 68 000  Medicine Hat: about 65 000  Lethbridge: about 100 000 | Uses collected data to answer questions and draw conclusions  “Most students in my class drink about 4 glasses of water a day.  Of the 3 cities, Lethbridge has the greatest population and Medicine Hat has the least.” |
| **Observations/Documentation** | | | |
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