

Learning Outcomes Covered:

9B: I can identify and address problems related to data collection.

CURRICULAR COMPETENCIES Questions:

1. Name a problem with each data collection. (RA)

- a) To discover common fears, Chris asks his classmates if they are frightened by spiders, snakes, rats, or slugs.

Privacy

- b) To find out the proportion of people who recycle tin cans, a person counts the number of households with tin cans in their recycling bins.

Privacy & time

- c) To estimate how much meat to buy for a barbecue party, Sarah asks her guests: “Do you prefer beef or chicken kebabs?”

use of language

2. Kevin thinks his drama club should spend more money on props. During the intermission of the spring play, he surveys the audience and the cast to see if they agree. (CnRf)

- a) Describe how the timing of his question may influence the responses.

Members are focusing on the play.

Audience is probably resting or discussing the play.

- b) In what setting might the responses be different than those Kevin received?

After the show, when audience has seen everything that the drama club has to offer.

3. Rena wanted to find out how often people in her neighbourhood used the local bike paths or walking trails. She asked her neighbours the question: “How much time do you spend outdoors each month?” (CmRp)

- a) How do you think her neighbours will interpret this question?

They might be thinking all the outdoor activities, not just local bike paths or walking trails.

- b) How could the question be rewritten so it would more accurately reflect what Rena wants to know?

How many hours do you ride your bike on local bike paths or walk on the walking trails in a month?

- c) Who might be interested in her findings? Why?

Only those who are active, it looks good to say I go out for many hours.

4. a) Describe how each question reveals a bias of the questioner. (RA)

- i) Do you think it would be a good idea to ban French fries because they contain trans fats?

use of language, it tells you a negative fact about French fries.

- ii) Which sport is your favourite: soccer, tennis, or judo?

only 3 choices.

- b) Rewrite each question to eliminate the bias. Explain how your question is an improvement.

i) Do you think it would be a good idea to ban French fries?

ii) What is your favourite sport?

ONGOING LEARNING ACTIVITIES:

CORE: Page 441: Curricular Competencies: 3, 4, 5, 6, 7, 9, 10, 13

ADVANCED: Page 444: 14