## **Self-Reflection: SMART questions in real life**

1.

Question 1



### Asking real-world questions



In this activity, you are going to have a "data conversation" with someone you know, either in person, on the phone, or on a video chat. Think of someone in your life who interacts with data to make better decisions. This might be a family member who runs a small business, a friend who runs a committee for the Parent-Teacher Association, or a neighbor who teaches piano lessons. All of these people turn to data in some way to be more effective in their roles.

You can let them know you're training to be a data analyst, and are hoping to have a "data conversation" with them to practice your asking skills. Hopefully, you'll end up with some useful recommendations that will benefit you both.

Step 1: Planning

Start by taking a few minutes to think about who you are going to speak with. Use the SMART question framework to make sure each question you ask makes sense based on their field. Each question should meet as many of the SMART criteria as possible. As a reminder, SMART questions are:

* Specific: Questions are simple, significant, and focused on a single topic or a few closely related ideas.
* Measurable: Questions can be quantified and assessed.
* Action-oriented: Questions encourage change.
* Relevant: Questions matter, are important, and have significance to the problem you’re trying to solve.
* Time-bound: Questions specify the time to be studied.

For instance, if you are having a conversation with someone who works in retail, you might lead with questions like:

* Do you currently use data to drive decisions in your business? If so, what kind(s) of data do you collect, and how do you use it?
* Are there business decisions or changes that you would make if you had the right information? For example, if you had information about how umbrella sales change with the weather, how would you use it?

If you are having a conversation with a teacher, you might ask different questions, such as:

* What kind of data do you use to build your lessons?
* Do you use others’ data to support the concepts students are learning?
* How do you use grading data?

Some of these questions ask about specific types of data, or about the context of the data. These questions are relevant to the role of the person you are asking, and encourage more complete and informative answers.

Step 2: Creating questions

Overall, your goal is to come up with questions to help you understand more about the data the individual usually interacts with, limitations of the data they have, and their business goals. For this step, review the following advice:

* Avoid technical jargon.
* Prioritize your questions: Ask the most important and impactful questions first to save time.
* Make your time count: Stay on subject during the conversation.
* Clarify your understanding: To avoid confusion, briefly summarize the given answers to make sure you understood it correctly. This will go a long way in helping you avoid mistakes.

For example, in a conversation with a teacher, you might check your understanding with a statement like, “Just to double check that I understand what you’re saying correctly, you currently use grading data in the following ways…”

Depending on the field the person is in, they may not be comfortable sharing more detailed data with you, and that's ok! Be sure to respect what the person is willing to share. And if they don't share detailed data (for example, maybe a business owner won't want to share sales spreadsheets), you could always create some sample data yourself, and use that as a starting point for your analysis.

Step 3: Take good notes!

This may seem obvious, but it’s a common mistake and one easily avoided by sticking to a process of asking questions, clarifying your understanding of their response, and then briefly recording it in your notes.

Remember, if a question is worth asking, then the answer is worth recording. Challenge yourself to take great notes during your conversation. At a minimum, good notes include:

* Facts: Any concrete piece of information is usually worth writing down. Dates, times, names, and other specifics that pop up.
* Context: Facts without context are useless. Note any relevant details that are needed in order to understand the information you gather.
* Unknowns: Sometimes you may miss an important question during a conversation. Make a note when this happens so you know to figure out the answer later.

For example, if we had a conversation with an ice cream shop about collecting data on customer flavor preferences, our notes might appear something like this:

* Project: Collect customer flavor preference data.
* Overall business goal: Use data to create more popular flavors.
* Two data sources: Cash register receipts and completed customer surveys (email).
* Target completion date: Q2
* To do: Call back later and speak with the manager about the location of survey data.

The notes you decide to take are going to differ greatly based on the data conversation you have. The important thing is that your notes are specific, organized, and concise.

Now you’re ready to have a great conversation about data in real life.

### Reflection



Using the text box below, go through each of the above steps to plan your conversation about data. Think about potential candidates, brainstorm some SMART questions, and get an idea of the information you want to note during the conversation.

Make a list of two or three people you want to speak with. Create at least three SMART questions.

**1 / 1 point**

Can you tell us what is the most purchased flavor of ice cream and who is the buyer of this flavor?

what are the top five flavors of ice cream which is purchasing the most and please tell us who are the customers of this 5 flavor the most?

what are less purchased ice cream flavors and who are the customers of this flavor?

**Correct**

Thank you for your response! Coming up with SMART questions for data-driven conversations is one of the most important tools in a data analyst’s arsenal. The more practice you get with this, the better!