

USER TEST RESULTS

SAS University Edition download materials
Amy Glass and Elisabeth Parker

June 12, 2017

PARTICIPANTS

For this study, we interviewed SAS interns from the Cary, NC and Pune, India offices. We chose interns in order to emulate the target audience of SAS University Edition, college-aged students. These ten students were mostly within the 19-21 age range, and many majored in related fields like computer science, user experience design, and graphic design. They largely reported confidence with navigating the Internet and following complicated written instructions, but had little experience with SAS software. For more detailed information on the participants, see Appendix 1.

TEST SET-UP

We developed a two-part survey that we implemented via Google Forms. In 7 cases, the user answered preliminary survey questions, studied the infographic (see Image 1), answered verbal questions and then filled out the second component of the survey. For our 2 tests with interns from the Pune office, the users studied the infographic first, answered verbal questions second, and filled out the survey on their own time shortly thereafter. One user had a visual impairment, so we adapted the user test to make it all verbal.

The preliminary survey was intended to gather demographic information about the participants. We also posited some questions

regarding confidence in following instructions and the helpfulness of visual information, which we compare to the users' comments and results in the following section. For more detailed information on the set-up of our tests, see Appendix 2.

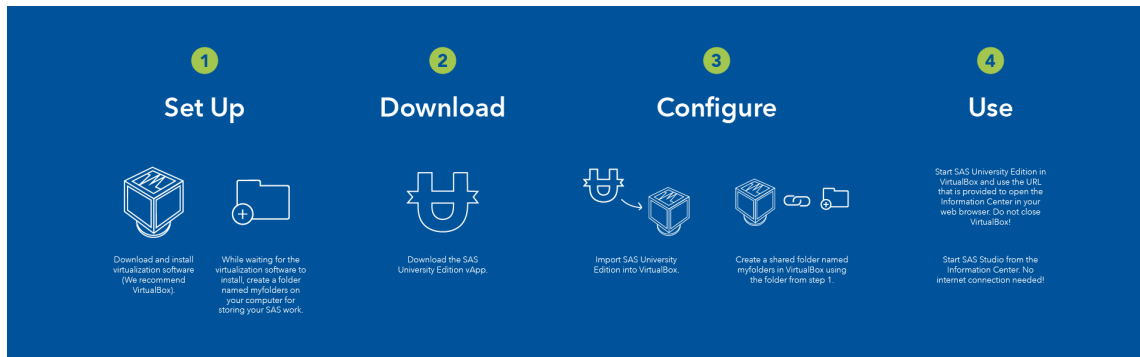


Image 1: Original infographic

RESULTS

Overall, these tests indicated that the inclusion of an infographic could be helpful to give users a mental model of the download process for SAS University Edition before they are exposed to the detailed instructions that are currently provided. The infographic that we tested on had many strengths and a few weaknesses, so in addition to summarizing our findings we have also included a revised version of the infographic.

Benefits

Perhaps the strongest statistic in the infographic's favor was the 90% of users who felt either confident or very confident that they could follow the instructions in the infographic correctly. In the pre-survey, only 50% of these users claimed the same levels of confidence in their abilities to follow written instructions correctly, so it seems that viewing the infographic boosts confidence. One user said the infographic was "perfect" because it is short, to the point, and doesn't include an overwhelming amount of text.

The most popular aspect of the infographic was the iconography. The users described the graphics as “consistent”, “less intimidating”, and “more friendly” compared to a primarily text-based set of instructions. This fits with the fact that every user claimed in the preliminary survey that visual cues or infographics helped them understand directions. Every user spoke positively of the included graphics, and one even said that “the icons are helpful” immediately upon reading the infographic. There were some pain points relating to the icons, which are discussed below.

Users also stated that the segmented format of the infographic made the instructions easier to follow and understand. Part of this effect was due to the relative ease of gauging where you are in the download process, which one user claimed would help her avoid getting frustrated. When asked to describe the process in their own words, many users still based their summaries on the four steps established by the infographic, which shows that this visual representation helped them to formulate a comprehensible mental model.

Shortcomings

When asked what they would change about the infographic to make it more helpful, the users echoed two primary issues: vernacular that doesn’t make sense in the isolated context of the infographic and confusing text/iconography for the second component of step 3 (“Create a shared folder...”). Two users also expressed a desire for the infographic to have more distinct visual organization, such as color coding or iconography that distinguished between objects and actions. We also noted that the infographic didn’t fit with the visual language of the SAS University Edition website.

The most common pain point was the second half of step 3, which uses a multi-part icon and tells users to “Create a shared folder named ‘myfolders’ in VirtualBox using the folder from step 1.” Many users expressed confusion about this step, both because of the wording and the iconography. The word “create” led people to believe that they would be creating a totally new folder

separate from the one created in step 1, which contrasted the instruction to use that same folder. 80% of the users also thought that the iconography represented linking VirtualBox and a folder, which is confusing for two reasons: One, the verb being expressed in the image and the text are different (link vs. create). Secondly, the verb that most accurately reflects what truly happens in this step is “share”, as the users who had experience with this download process indicated. That idea is almost expressed in the text, which refers to a “shared folder”, but users latched instead to the idea of “linking” as illustrated in the graphic element.

The external vernacular that most users struggled with was “VirtualBox” and “virtualization software.” Although 5 of the 10 users had actually downloaded SAS University Edition before, some of them echoed the inexperienced users’ confusion about what exactly VirtualBox is and why it’s necessary. Three users with additional familiarity with virtualization were comfortable with this aspect of the instructions, but even they recognized that “someone who doesn’t know how to use VirtualBox might not understand” the relevant information as it stands in the infographic.

People were also confused about the significance of the “Information Center” as discussed in step 4. They asked questions like “What is ‘information center’ and why do I need to open it?” and “Is ‘Information Center’ a Windows thing? I’ve never heard of it.” It seems that this detail doesn’t convey any helpful information when isolated from the actual software, which leads it to confuse rather than assist the user.

Solutions

To maximize the potential helpfulness of this infographic, we created a revised version that incorporates the suggestions and aims to mitigate the frustrations gathered from the user tests. We changed the iconography for step 3 and added an icon for step 4, along with simplifying the text of those two steps. We also changed the color scheme to better conform to the visual language of the existing website. See Images 2 and 3 for our edited infographic and a mockup of the infographic as a webpage banner.

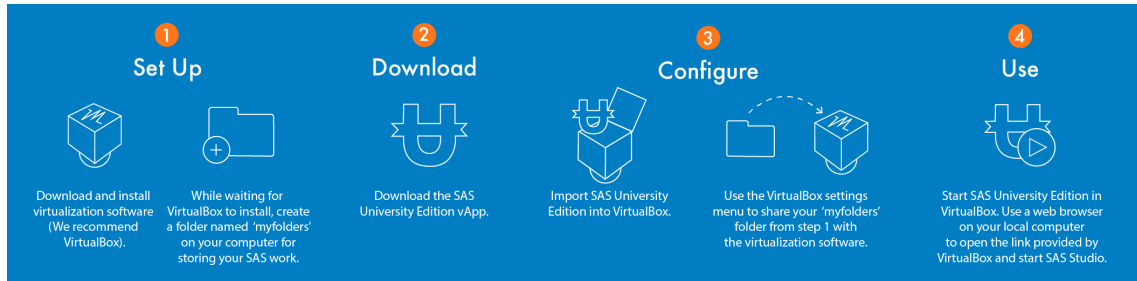


Image 2: Revised infographic

Download SAS[®] University Edition

Start by choosing your operating system below:

Windows OS X LINUX

Before You Begin

To ensure a smooth, trouble-free installation, make sure that your Windows desktop or laptop computer meets the minimum system requirements:

- Microsoft Windows 7, 8, 8.1 or 10
- 64-bit hardware, minimum 1GB RAM
- One of these browsers:
 - Microsoft Internet Explorer 9, 10 or 11
 - Mozilla Firefox 21 or later
 - Google Chrome 27 or later

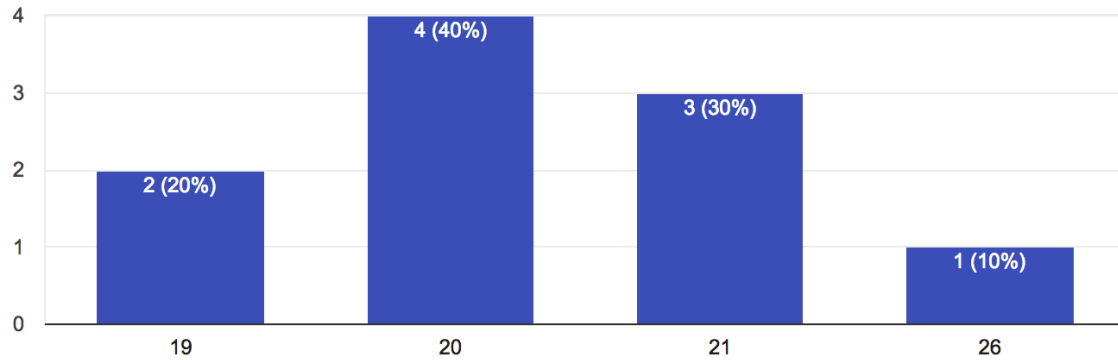
Image 3: Infographic as website banner

APPENDIX 1

User Demographic Information

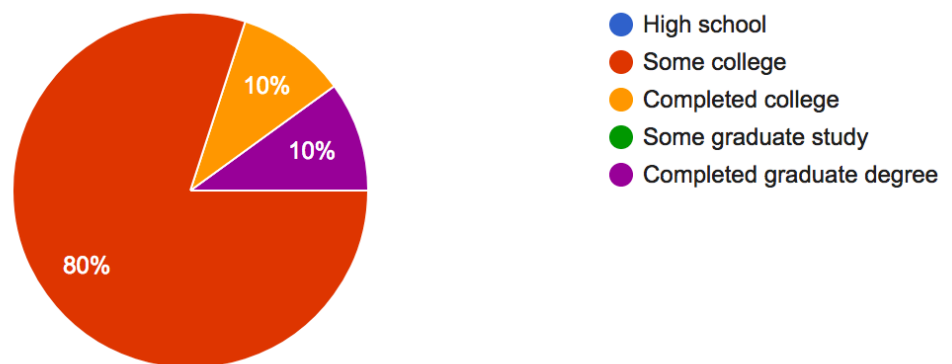
Age

10 responses



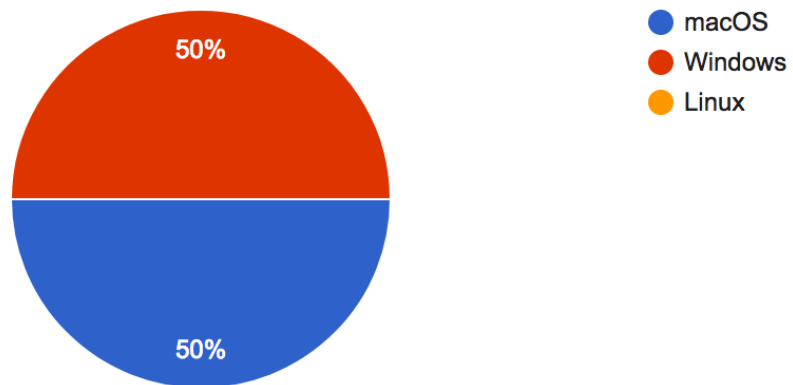
Education level

10 responses



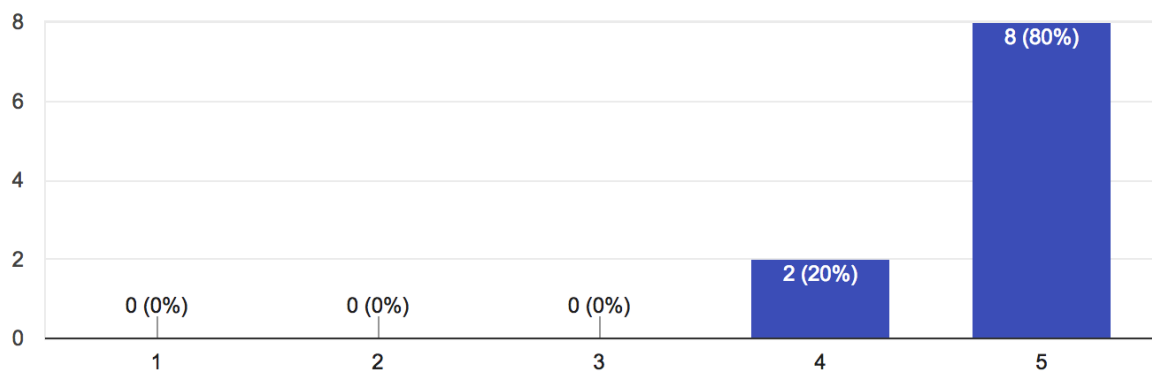
Operating system of choice

10 responses



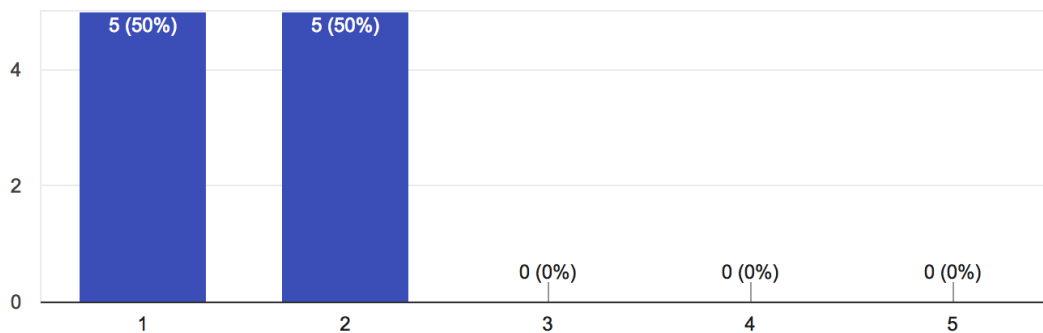
How comfortable are you with navigating the Internet?

10 responses



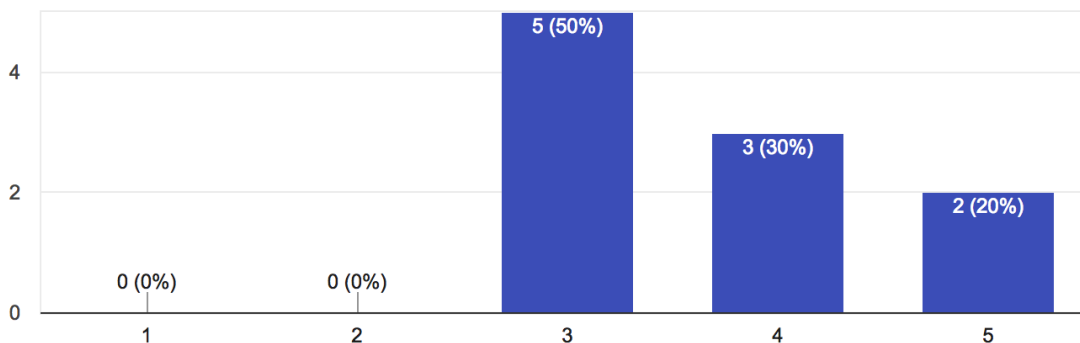
How much experience do you have with SAS software?

10 responses



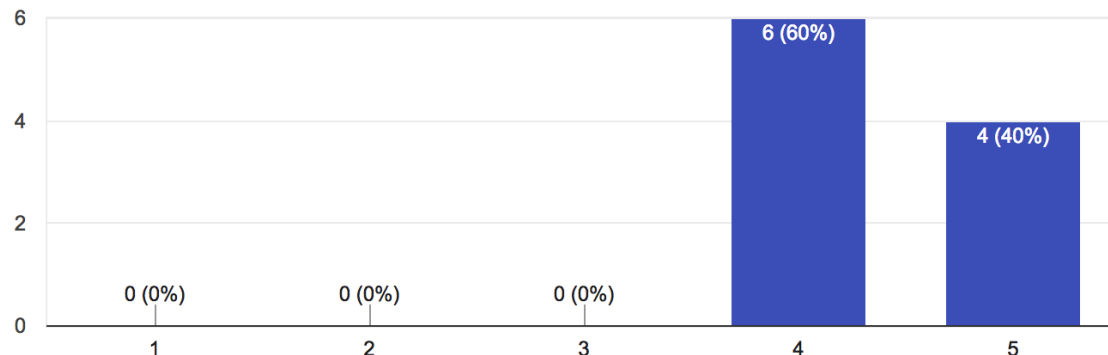
If given a complicated set of written instructions, how confident are you that you would be able to follow them correctly?

10 responses



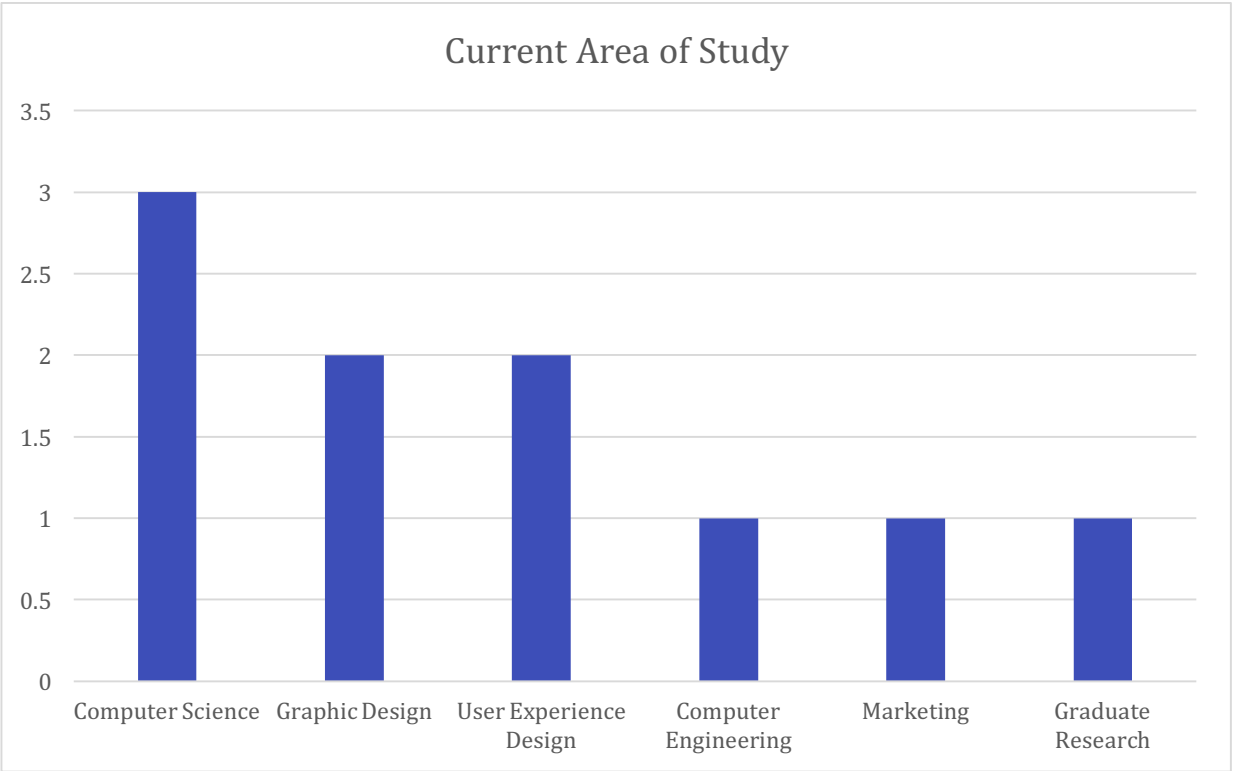
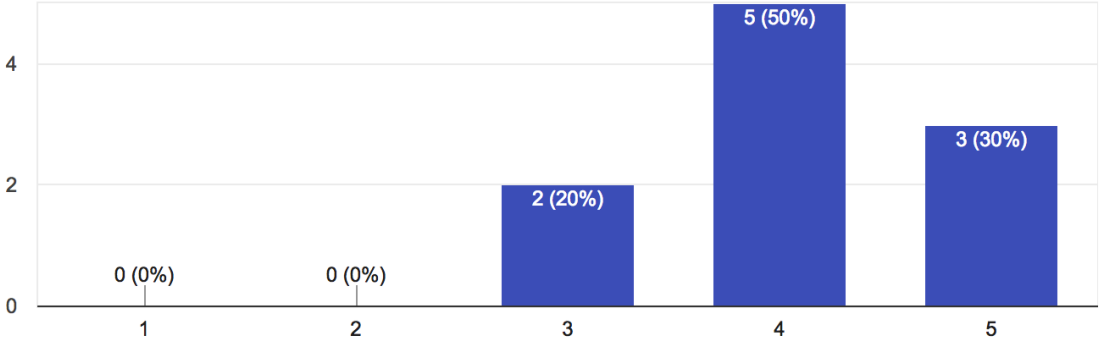
To what extent do you feel that visual cues or infographics help you to understand directions?

10 responses



How would you rate your understanding of these instructions?

10 responses

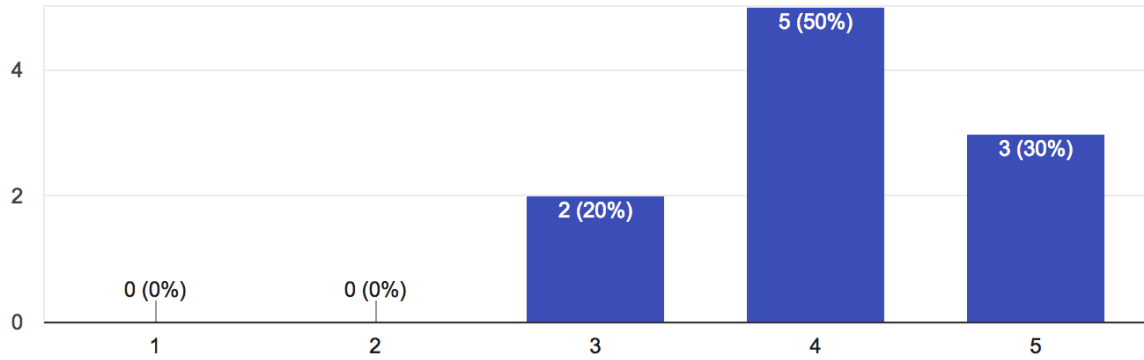


APPENDIX 2

Responses to Infographic

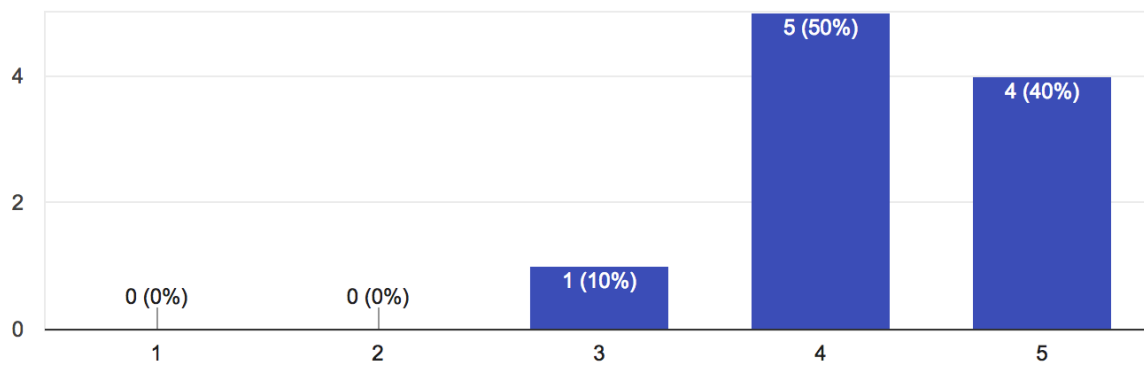
How would you rate your understanding of these instructions?

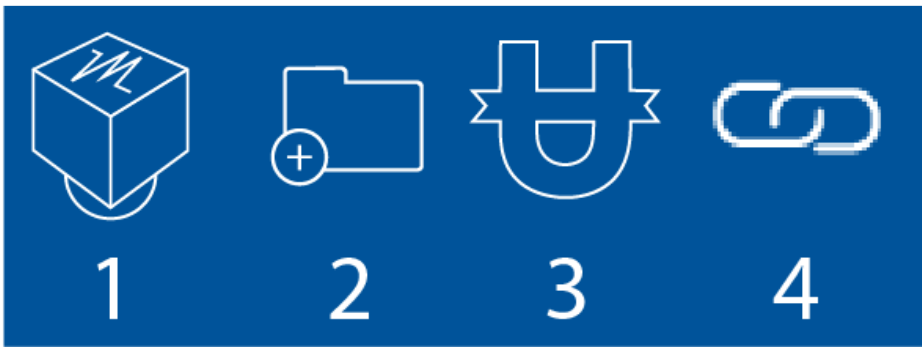
10 responses



How confident are you that you could follow these instructions correctly?

10 responses





What do you think each of the above icons represented in the infographic?



Icon 1



Icon 2



Icon 3



Icon 4