Group Annotations Guidelines:

After reviewing all of questions and responses, we agreed on two main categories to divide the types of questions, subjective and objective. The reason that we made the decisions is we find it is better to rate the "helpfulness" of the responses from two types of annotation guidelines.

The over 400 questions contain academic/professional questions, meanwhile, also include great numbers of unprofessional/casual questions. We defined the academic questions here as the scientific fact with an exact answer.

For example, question 't3_n46mo5': When we 'lose' our voice, like during a cold, what actually happens to our vocal cords?

What's more, these types of questions include terminology explanation, distinguishing scientific terms 'electrons', 'vocal cords' etc. For example, the question 't3_n6embi': *Why does voltage not effect battery charge time?* Therefore, we believed these questions have a more illustrative and straightforward annotation system to criticize and rate their corresponding responses. Thus, we may rate the responses from its accuracy and reasoning. For these types of question, we concluded them as **objective**, and we set specific ratings for the responses of objective questions.

The unprofessional/causal approaches refer to the rest types of questions. These questions are more subjective, for example, they may ask about what people have for breakfast, or imaginary settings such as "*How would you change the education system?*", or ask about appropriate behavior when someone met something embarrassing etc. For instance, the question: "*How do I tell my mom I don't want to communicate with her as much?*" is completely subjective, and its response is based on personal experiences. For these questions, we actually do not know how to define "helpfulness" at first, because we don't know if we should stand at the author's perspective to define "helpfulness" or from an audience's feelings. Meanwhile, we are uninformed how author viewed the responses, what if he/she happens to enjoy the lame responses, and just looking for fun? Thus, we still decided to stand at the perspective of the audience and include partial enjoyment as one of the criterion towards the ratings of responses. Thus, we have another guideline for subjective questions.

Guideline towards objective questions:

1 point: The answer does not follow what the question is asking about / The response is too

aggressive (with too much personal opinions).
Reasoning: the response to objective questions is more straightforward and with exact answer, deviate the question or too much personal expressions is not helpful.
Example:
Q: what do astronauts do with CO2?
A: How do they assure the supply with O2 though? Is it just shipped up constantly as a gas or do they get it from another source or something?

2 points: The answer does not have explanation or reasoning.
Reasoning: Answer with easy-to-understand explanation or reasonable example may be more helpful for audiences. 2 points for the correct response.

Example:
Q: Do birds fly for days while over the ocean? How do they sleep?
A: Hope I'm not too late for this one. Sailor here, we've had birds try and land on our ship for rest. But we don't carry food for them, so eventually we'll just have a few bird carcasses we have to push/wash overboard. Or if they try to rest near a radar or communication system to stay away from humans, they just get cooked due to the radiation. Nothing we can really do about it.

3 points: The response has answer with explanation. It can contain personal opinion for scientific fact or certain terminology, but it does need to have reasonable illustration.
Reasoning: We allowed expressing personal opinions for discussion, but it need to provide the reason why it is acceptable.

Example:
Q: What is a wave in physics?
A: For light there's nothing actually wiggling. A photon can be "smeared-out" over a range of locations, and you can use the math of waves to describe the density of the smear.

4 points: The answer is complete, accurate, and with clear examples or explanations to support the main response.
Reasoning: This response provides enough information for what the author is looking for the

question.

Example:

Q: Why is the pyramid of Louvre so architecturally relevant? What features does it have which makes it a majestic piece of engineering?

A: Your opinions are shared with most of Paris and half of the rest of the world. It was designed in the early 80s when this type of architecture was quite new and modern, which did not last long. It is sort of minimalistic which is a great contrast to the surrounding buildings but its design is still more driven by aesthetics rather then functional design which was in contrast with brutalism which was the most popular minimalistic architectural movement of the time. It does provide a lot of light and open air to the lobby underneath it which is inspired by Roman villas. So you can say a lot of bad things about the pyramid. And some good things if you take the time at which it was designed into account. But at least it does make people talk about the Louvre and have become a very iconic landmark in Paris.

5 points: Full explanation with examples/explanations and citations or other references or the websites of expanded content.

Reasoning: We believe citation is a critical part to support the correctness of the response and make it more illustrative.

Example:

Q: Why are free electrons able to move around an entire object?

A: Electrons are able to move around objects when the force from the nucleus holding onto the electron is overcome by some external force. When the outermost electrons are held loosely enough by the nucleus, [they will move between atoms when subjected to an electrostatic or magnetic force.](https://www.edinformatics.com/math_science/why-do-electrons-flow.html#:~:text=When%20a%20negative%20charge%20is,a%20conductor%20electrons%20are%20repelled.&text=When%20electric%20voltage%20is%20applied,move%20toward%20the%20positive%20side.) A full explanation of this must start with defining the atom. [This Northwestern University physics document defines atoms as the building blocks for everything in the universe](https://www.nrc.gov/reading-rm/basic-ref/students/science-101/what-is-an-atom.html). They are sphere-like in shape and are made up of three smaller subatomic particles.[Protons and neutrons make up the center of the sphere called the nucleus and the electrons fly around outside the nucleus in a sort of

cloud.](https://www.qrg.northwestern.edu/projects/vss/docs/Propulsion/1-what-is-an-atom.html) A common analogy is that electrons float around the nucleus of an atom kind of like vapor droplets in a rain cloud, moving around in space while staying within the cloud itself. [The big difference between electrons and the other subatomic particles is that they are free to move around outside the nucleus](https://www.britannica.com/science/electron), which makes it easier for them to move from atom to atom. Electrons are able to move when they 鈥渂reak free鈥?from the nucleus that was holding in the cloud. The only reason that they are able to do this, is because of an outside force influencing them. [Much like a moth is attracted to a flame](https://www.physicscentral.com/explore/action/dressed-to-impress.cfm), an electron is attracted to the opposite charge, typically the protons in the nucleus. But as this accredited textbook talks about, [when the attraction force to the protons of another atom is stronger than the attraction to an electron's own nucleus, the other atom will pull the electron away from its atom.](https://www.physicsclassroom.com/class/estatics/Lesson-1/Charge-Interactions) This will happen when a positively charged piece of metal moves close to a neutral piece of metal, some of the electrons in the neutral piece will be pulled toward the positive piece. The outside force of the positive piece allows for electrons to move around the neutral piece because it is greater than the force of the nucleus trying to hold onto the electrons. To further visualize this, see the link attached below. This concept can also be visualized by imagining there is a dog leashed to a tree. Left alone, the dog might simply be bored, walking or standing around the tree in any random location. In this scenario, think of the dog as the electron, the tree as the nucleus, and the leash indicates how tightly bound the electron is to the nucleus. As of now, the dog is free to move around the tree as he pleases, but if he were to smell a steak at the next tree over he would be immediately attracted to it. He would want to run in that direction as if the steak was a positive charge. If the dog's attraction to the steak is stronger than the leash holding him back, he'll break away from his tree and run to the next tree over. The same applies to electrons, they are attracted to opposite charges and when that attraction overcomes their attraction to the nucleus they break free.

Guideline towards subjective questions:

1 point: Offensive / Completely irrelevant / Inappropriate Content

Reasoning: the subjective questions may raise disrespectful response, or offensive content when it comes to religion/gender/race etc. problem.

Example:

Q: How do you insult someone without cussing?

A: Fucking go fucking fuck your fucking self and fucking eat fucking shit you fucking shit eating fucking shit eater who fucking eats fucking shit!

2 points: Dull Response / Slightly off the topic

Reasoning: As we are considered enjoyment towards the response as one of the criterion for subjective question, the dull response will only have 2 points. Meanwhile, if the response only partially relates to the question, it will have 2 points as well.

Example:

Q: what is the best tv show?

A: The one you enjoy most.

3 points: The answer is corresponding to the question, and provide a complete reason or an expansion to support the main topic.

Reasoning: The answer is coherent with the question and it expands more detail to support their idea.

Example:

Q: What fictional food or beverage would you like to try IRL?

A: I've always been interested in lembas bread from Tolkien and manna from the Abrahamic scriptures. Oh, and Greek ambrosia!

4 points: The answer is informative/easy-to-follow/interesting and expand a short story or personal experience

Reasoning: With a short story or personal experience to support the opinion, such as some questions ask about suggestions.

Example:

Q: What should I do with a bad friend?

A: I believe that you should just be honest and tell him how you feel. Tell him in a calm tone and explain him that when there is arguing both sides are responsible. He is being childish.

Explain your thoughts and according to how he reacts you stay or leave. Also I feel you, it is very difficult for me to get away from people or unfriend them xD. But sometimes you gotta teach them a lesson~

5 points: The answer is attracted to read with meaningful content and supportive explanation. Reasoning: Even if the question is an imaginary setting, the response still provides meaningful content (where inspires some thoughts and reflections), and lead people to think about the depth part of the question, or the content itself is educational.

Example:
Q: Look for books to know and understand women?
A: Well done you for addressing this problem so young; that says a lot about your character! It's simple really; women are individuals, people, just like you; so read widely, and try to read as many good female authors as you can. \[not all female writers are feminist, some are writing books as bad as the worst male porn-obsessed authors.\] I suggest Girl, Woman, Other by Bernadine Evaristo; all about women of all ages and types in London, with their common thread being they are all POC. It's a very funny, interesting and sometimes shocking story. I think you'd find it fascinating! If you want to increase your understanding of how society all over the world treats women, read Rebecca Solnit's Men Explain Things To Me. It's quite a horrifying read about all the ways women are treated badly, by the law, by society, by the media. It's in 7 shortish essays so you don't have to read it in one go! Good luck.