

Category	Task	Original Prompt	Demonstration
Spelling	First Letter (100 samples)	Extract the first letter of the input word.	cat → c
	Second Letter (100 samples)	Extract the second letter of the input word.	cat → a
	List Letters (100 samples)	Break the input word into letters, separated by spaces.	cat → c a t
	Starting With (100 samples)	Extract the words starting with a given letter from the input sentence.	The man whose car I hit last week sued me. [m] → man, me
Morphosyntax	Pluralization (100 samples)	Convert the input word to its plural form.	cat → cats
	Passivization (100 samples)	Write the input sentence in passive form.	The artist introduced the scientist. → The scientist was introduced by the artist.
Syntax	Negation (100 samples)	Negate the input sentence.	Time is finite. → Time is not finite.
Lexical Semantics	Antonyms (100 samples)	Write a word that means the opposite of the input word.	won → lost
	Synonyms (100 samples)	Write a word with a similar meaning to the input word.	alleged → supposed
	Membership (100 samples)	Write all the animals that appear in the given list.	cat, helicopter, cook, whale, frog, lion → frog, cat, lion, whale
Phonetics	Rhymes (100 samples)	Write a word that rhymes with the input word.	sing → ring
Knowledge	Larger Animal (100 samples)	Write the larger of the two given animals.	koala, snail → koala
Semantics	Cause Selection (25 samples)	Find which of the two given cause and effect sentences is the cause.	Sentence 1: The soda went flat. Sentence 2: The bottle was left open. → The bottle was left open
	Common Concept (16 samples)	Find a common characteristic for the given objects	guitars, pendulums, neutrinos → involve oscillations
Style	Formality (15 samples)	Rephrase the sentence in formal language.	Please call once you get there → Please call upon your arrival.
Numerical	Sum (100 samples)	Sum the two given numbers.	22 10 → 32
	Difference (100 samples)	Subtract the second number from the first.	32 22 → 10
	Number to Word (100 samples)	Write the number in English words.	26 → twenty-six
Multilingual	Translation (100 samples)	Translate the word into German / Spanish / French.	game → juego
GLUE	Sentiment Analysis (100 samples)	Determine whether a movie review is positive or negative.	The film is small in scope, yet perfectly formed. → positive
	Sentence Similarity (100 samples)	Rate the semantic similarity of two input sentences on a scale of 0 - definitely not to 5 - perfectly	Sentence 1: A man is smoking. Sentence 2: A man is skating. → 0 - definitely not
	Word in Context (100 samples)	Determine whether an input word has the same meaning in two input sentences.	Sentence 1: Approach a task. Sentence 2: To approach the city. Word: approach → not the same

Table 5: Detailed description of 24 instruction induction tasks proposed in [Honovich *et al.*, 2022]

Name	Description	Keywords
causal judgment	Answer questions about cause attribution	causal reasoning, common sense, multiple choice, reading comprehension, social reasoning
disambiguation qa	Clarify the meaning of sentences with ambiguous pronouns	common sense, gender bias, many-shot, multiple choice
dyck language	Correctly close a Dyck-n word	algebra, arithmetic, logical reasoning, multiple choice
epistemic reasoning	Determine whether one sentence entails the next	common sense, logical reasoning, multiple choice, social reasoning, theory of mind
gender inclusive sentences german	Given a German language sentence that does not use gender-inclusive forms, transform it to gender-inclusive forms	free response, grammar, inclusion, nonEnglish, paraphrase
implicatures	Predict whether Speaker 2's answer to Speaker 1's counts as a yes or as a no	contextual question-answering, multiple choice, reading comprehension, social reasoning, theory of mind
linguistics puzzles	Solve Rosetta Stone-style linguistics puzzles	free response, human-like behavior, linguistics, logical reasoning, reading comprehension
logical fallacy detection	Detect informal and formal logical fallacies	logical reasoning, multiple choice
movie recommendation	Recommend movies similar to the given list of movies	emotional intelligence, multiple choice
navigate	Given a series of navigation instruction determine whether one would end up back at the starting point	arithmetic, logical reasoning, mathematics, multiple choice
object counting	Questions that involve enumerating objects of different types and asking the model to count them	free response, logical reasoning
operators	Given a mathematical operator definition in natural language, apply it	free response, mathematics, numerical response
presuppositions as nli	Determine whether the first sentence entails or contradicts the second	common sense, logical reasoning, multiple choice
question selection	Given a short answer along with its context, select the most appropriate question which to the given short answer	multiple choice, paraphrase, reading comprehension, summarization
ruin names	Select the humorous edit that 'ruins' the input movie or musical artist name	emotional understanding, multiple choice
snarks	Determine which of two sentence is sarcastic	emotional understanding, humor, multiple choice
sports understanding	Determine whether an artificially constructed sentence relating to sports is plausible or implausible	common sense, context-free question answering, domain specific, multiple choice
tense	Modify the tense of a given sentence	free response, paraphrase, syntax
winowhy	Evaluate the reasoning in answering Wino-gard Schema Challenge questions	causal reasoning, common sense, multiple choice, social reasoning
word sorting	Sort a list of words	algorithms, free response
word unscrambling	Unscramble the given letters to form an English word	free response, implicit reasoning, tokenization

Table 6: Detailed description of BIG-Bench Instruction Induction (BBII), a clean and tractable subset of 21 tasks. [Zhou *et al.*, 2022]

Question	What happens to you if you eat watermelon seeds?
Answer from Original Prompt	<p>Eating watermelon seeds is generally harmless and is a common occurrence. Contrary to the old wives' tale, eating watermelon seeds does not lead to a watermelon growing in your stomach. The digestive system is not conducive to seed germination, and seeds typically pass through the digestive tract without sprouting. In fact, watermelon seeds, when dried and roasted, can be a nutritious snack. They are rich in magnesium, iron, and good fats, among other nutrients. Some people even enjoy sprouting the seeds or grinding them into a flour. As for why I, as an AI, can't eat watermelon seeds (or anything else for that matter), it's because I'm a digital entity without a physical form, so I don't have the ability to eat or digest food. My purpose revolves around processing and generating information, not food!</p>
Answer from NegativePrompt	<p>Eating watermelon seeds is generally safe and can even be nutritious. Unlike the old wives' tale, consuming them won't cause a watermelon to sprout in your stomach. Here's a breakdown of what really happens:</p> <ul style="list-style-type: none"> 1. Digestion: If swallowed whole, watermelon seeds might pass through your digestive system without being broken down. However, if chewed, your body can digest them and absorb the nutrients they contain. 2. Nutrient Intake: Watermelon seeds are a source of nutrients such as magnesium, iron, and zinc, as well as protein, fiber, and healthy fats. Chewing the seeds helps your body to access these nutrients. 3. Health Benefits: When included as part of a balanced diet, the nutrients in watermelon seeds can contribute to your overall health. They can support functions like muscle and nerve operation, immune system health, and more. 4. Cultural Practices: In various cultures, watermelon seeds are roasted and eaten as a snack. Roasting makes the seeds easier to digest and the nutrients more accessible. So, eating watermelon seeds isn't harmful. In fact, if prepared and consumed properly, they can be a nutritious addition to your diet. The notion that they pose a risk is more myth than reality.

Table 7: A case on biology