# 1 Intuitive Physics Questions

List of questions and answers for intuitive physics.

## 1.1 Intuitive Physics - Rolling

"There is a tilted board above a bucket. Where does a ball end up if it is placed	
on the board?"	
GPT-3	The ball will end up in the bucket.
Luminous A:	
	The ball will roll down the board.
	[continued]
OPT	A. It will fall into the bucket.
	B. It will fall into the bucket.
	[continued]

"There is a tilted board above a bucket. Where does a ball end up if it is placed	
on the board, if it does not end up in the bucket?"	
GPT-3 The ball will end up on the ground.	
Luminous A ball is placed on a tilted board. Where does it end up if it is placed	
on the board, if it does not end up in the bucket?	
A ball is placed on a tilted board. Where does it	
[repeating]	
OPT A. It will fall into the bucket.	
B. It will fall into the bucket.	
[continued]	
"There is a board above a bucket. Where does a ball end up if it is placed on the	
board?"	

GPT-3 The ball will end up in the bucket.

Luminous A ball is placed on a table. Where does it end up if it is rolled under a

table?

A ball is placed on a table. Where does it end up if it is rolled under a table?

[repeating]

OPT A. It falls into the bucket.

B. It falls into the bucket and bounces off the board.

[continued]

"There is a leveled board above a bucket. Where does a ball end up if it is placed	
on the board?"	
GPT-3	The ball will end up in the bucket.
Luminou	s A: The ball will roll down the board and into the bucket.
	A: The ball will roll down the board and into the bucket.
	[repeating]
OPT	A. It falls into the bucket.
	B. It falls into the bucket and bounces off the board.
	[continued]
"A ball is	s placed on a table and rolls off. What does this tell us about the table?"
GPT-3	The table is not level.
Luminou	s A. The table is flat.
	B. The table is round.
	[continued]
OPT	A ball is placed on a table and rolls off. What does this tell us about the
	table?
	A ball is placed on a table and rolls off. What does this tell us about the
	table?
	[repeating]
"A ball	is placed on a surface and rolls off. What does this tell us about the
surface?"	
GPT-3	The surface is not level.
Luminou	is A ball is placed on a surface and rolls off. What does this tell us about
	the surface?
	A ball is placed on a surface and rolls off. What does this tell us about
	the surface?
	[repeating]
OPT	A ball is placed on a surface and rolls off. What does this tell us about
	the surface?
	A ball is placed on a surface and rolls off. What does this tell us about
	the surface?
	[repeating]

"A ball is placed on a table and rolls to the center. What does this tell us about		
the table?"		
GPT-3	The table is level.	
Luminous	s A ball is placed on a table and rolls to the center. What does this tell us	
	about the table?	
	A ball is placed on a table and rolls to the center. What does this tell us	
	about the table?	
	[repeating]	
OPT	A ball is placed on a table and rolls to the center. What does this tell us	
	about the table?	
	A ball is placed on a table and rolls to the center. What does this tell us	
	about the table?	
	[repeating]	
"A ball is	s placed on a surface and rolls to the center. What does this tell us	
about the	e surface?"	
GPT-3	The surface is curved.	
Luminous	s A ball is placed on a surface and rolls to the center. What does this tell	
	us about the surface?	
	A ball is placed on a surface and rolls to the center. What does this tell	
	us about the surface?	
	[repeating]	
OPT	A ball is placed on a surface and rolls to the center. What does this tell	
	us about the surface?	
	A ball is placed on a surface and rolls to the center. What does this tell	
	us about the surface?	
	[repeating]	

## 1.2 Intuitive Physics - Support

[repeating]

"A block is placed on one support. What happens if the support is removed?"	
GPT-3	If the support is removed, the block will fall.
Luminou	s A block is placed on one support. What happens if the support is re-
	moved?
	A block is placed on one support. What happens if the support is re-
	moved?
	[repeating]
OPT	A block is placed on one support. What happens if the support is removed?
	A block is placed on one support. What happens if the support is re-
	moved?
	[repeating]

"A block is placed on two supports. What happens if one of the supports is removed?"

GPT-3 If one of the supports is removed, the block will fall.

Luminous A block is placed on two supports. What happens if one of the supports is removed?

A block is placed on two supports. What happens if one of the supports is removed?

[repeating]

OPT A block is placed on two supports. What happens if one of the supports is removed?

A block is placed on two supports. What happens if one of the supports is removed?

A block is placed on two supports. What happens if one of the supports is removed?

"A block is placed on three supports. What happens if one of the supports is	
removed?"	
GPT-3	If one of the supports is removed, the block will fall.
Luminou	s A block is placed on three supports. What happens if one of the supports
	is removed?
	A block is placed on three supports. What happens if one of the supports
	is removed?
	[repeating]
OPT	A block is placed on three supports. What happens if one of the supports
	is removed?
	A block is placed on three supports. What happens if one of the supports
	is removed?
	[repeating]
"A block	is placed on three supports. What happens if the left support is re-
moved?"	
GPT-3	If the left support is removed, the block will fall to the left.
Luminou	s A block is placed on three supports. What happens if the right support
	is removed?
	A block is placed on three supports. What happens if the top support is
	removed?
	[repeating]
OPT	A block is placed on three supports. What happens if the left support is
	removed?
	A block is placed on three supports. What happens if the left support is
	removed?
	[repeating]

"A block	is placed on three supports. What happens if the right support is
removed?	
GPT-3	If the right support is removed, the block will fall to the left.
Luminou	s A block is placed on three supports. What happens if the left support is
	removed?
	A block is placed on three supports. What happens if the middle support
	is removed?
	[repeating]
OPT	A block is placed on three supports. What happens if the right support
	is removed?
	A block is placed on three supports. What happens if the right support
	is removed?
	[repeating]
1	is placed on three supports. What happens if the middle support is
removed?	
GPT-3	If the middle support is removed, the block will fall.
Luminou	s A block is placed on three supports. What happens if the middle support
	is removed?
	A block is placed on three supports. What happens if the middle support
	is removed?
	[repeating]
OPT	A block is placed on three supports. What happens if the middle support
	is removed?
	A block is placed on three supports. What happens if the middle support
	is removed?
	[repeating]
	s supported by a table. What happens if the table is removed?"
GPT-3	If the table is removed, the vase will fall to the ground.
Luminou	s A vase is supported by a table. What happens if the table is removed?
	A vase is supported by a table. What happens if the table is removed?
	[repeating]
OPT	A. The vase falls over.
	B. The vase falls over.
	[continued]

"An vase is supported by a table. What happens if the table disappears?"

GPT-3 If the table disappears, the vase will fall to the ground.

Luminous A vase is supported by a table. What happens if the table disappears?

A vase is supported by a table. What happens if the table disappears?

[repeating]

OPT A. The vase falls over.

B. The vase falls over.

[continued]

#### 1.3 Intuitive Physics - Collisions

"A heavy and a light ball are heading towards each other. Which ball will bounce away?"

GPT-3 The light ball will bounce away.

Luminous A:

The heavy ball will bounce away.

[continued]

OPT A heavy and a light ball are heading towards each other. Which ball will bounce away?

A heavy and a light ball are heading towards each other. Which ball will bounce away?

[repeating]

"Two equal weight balls are heading towards each other. Which ball will bounce away?"

GPT-3 The ball with more momentum will bounce away.

Luminous A:

The answer is:

[continued]

OPT A. The heavier ball

B. The lighter ball

[continued]

"Two balls are heading towards each other with the same speed. Which ball will bounce away?" GPT-3 The ball with more mass will bounce away. Luminous A: The ball with the higher mass will bounce away. [continued] OPT Answer: The ball with lesser mass will bounce away. Question: A ball is thrown upwards with a speed of 20 m/s. The ball is thrown upwards with a speed of 20 m/s. The ball is thrown upwards with a [repeating] "Two equal weight balls are heading towards each other with the same speed. Which ball will bounce away?" GPT-3 Both balls will bounce away. Luminous A: The answer is the one that is closer to the center of the circle. [continued] OPT A. The heavier ball B. The lighter ball [continued]

# 1.4 Intuitive Physics - Seesaw

"A heavy	and a light object are placed on a seesaw. Which object will move up?"	
GPT-3	The light object will move up.	
Luminou	Luminous A. The heavy object	
	B. The light object	
	[continued]	
OPT	A heavy and a light object are placed on a seesaw. Which object will	
	move up?	
	A heavy and a light object are placed on a seesaw. Which object will	
	move up?	
	[repeating]	

"A heavy	and a light object are placed on a seesaw. Which object will move
down?"	
GPT-3	The heavy object will move down.
Luminous	A. The heavy object
	B. The light object
	[continued]
OPT	A heavy and a light object are placed on a seesaw. Which object will
	move down?
	A heavy and a light object are placed on a seesaw. Which object will
	move down?
	[repeating]
"Two equ	al weight object are placed on a seesaw. Which object will move up?"
GPT-3	The object on the left will move up.
Luminous	A. The heavier object
	B. The lighter object
	[continued]
OPT	A. The heavier object
	B. The lighter object
	[continued]
	and a light object are placed on the same side of a seesaw. Which
object wil	ll move down?"
GPT-3	The heavy object will move down.
Luminous	A. The heavy object
	B. The light object
	[continued]
OPT	A heavy and a light object are placed on the same side of a seesaw.
	Which object will move down?
	A heavy and a light object are placed on the same side of a seesaw.
	Which object will
	[repeating]

#### 1.5 Intuitive Physics - Weights

"What is heavier: A hand full of metal or a hand full of feathers?" GPT-3 A hand full of metal is heavier than a hand full of feathers. Luminous A: The answer is that the metal is heavier. A: The answer is that the metal is heavier. [repeating] OPT A hand full of feathers. Why? [continued] "What is heavier: A kilogram of metal or a kilogram of feathers?" A kilogram of metal is heavier than a kilogram of feathers. Luminous A: The answer is that the kilogram of feathers is heavier. A: The answer is that the kilogram of feathers is heavier. [repeating] OPT A kilogram of feathers is heavier than a kilogram of metal. Why? [continued] "What is heavier: A kilogram of metal or a kilogram of rock?" GPT-3 A kilogram of metal is heavier than a kilogram of rock. Luminous A: The kilogram is a unit of mass, not weight. A: The kilogram is a unit of mass, not weight. [repeating] OPT A kilogram of metal is heavier than a kilogram of rock. Why? [continued] "What is heavier: A kilogram of metal or a kilogram of lead?" GPT-3 A kilogram of lead is heavier than a kilogram of metal. Luminous A: The kilogram is a unit of mass. It is defined such that 1 kg is the mass of the International Prototype Kilogram (IPK), which is a platinumiridium international standard stored in France. If the IP OPT A kilogram of metal. Why? [continued]

""A kilogram of metal is heavier than a kilogram of feathers" is what most people say, but in reality"

GPT-3 they weigh the same.

Luminous , the weight of a kilogram of feathers is more than a kilogram of metal.

The reason is that the density of a substance is the mass of a substance divided by its volume.

[continued]

OPT , a kilogram of feathers is heavier than a kilogram of metal.

The reason is that a kilogram of metal is made up of atoms, and atoms are made up of protons, neutrons and electrons.

[repeating]

#### 1.6 Intuitive Physics - Tools

"A wooden beam is placed over a stone. A small plastic bottle is placed on one side. What will happen if a person jumps onto the other side of the beam?"

GPT-3 The beam will rotate and the person will jump into the air.

Luminous A. The bottle will break.

B. The bottle will not break.

[continued]

OPT A wooden beam is placed over a stone. A small plastic bottle is placed on one side. What will happen if a person jumps onto the other side of the beam?

"Mary can not move a heavy stone by herself. However, she brought a small object and a metal rod with her. Is Mary able to move the stone?"

GPT-3 No, Mary is not able to move the stone.

Luminous A:

The answer is no.

[continued]

OPT

A. Yes

B. No

[continued]

object and a metal rod with her. How can Mary move the stone?" GPT-3 Mary can use the metal rod as a lever to move the stone. Luminous A: The answer is that Mary can move the stone by herself. [continued] OPT A. Mary can move the stone by using the rod. B. Mary can move the stone by using the object. [continued] "Mary can not lift a heavy stone by herself. However, she brought a small object and a metal rod with her. Is Mary able to lift the stone?" GPT-3 No, Mary is not able to lift the stone. Luminous A: The answer is no. [continued] OPT A. Yes B. No [continued] "Mary can not lift a heavy stone by herself. However, she brought a small object and metal rod with her. How can Mary lift the stone?" GPT-3 Mary can use the metal rod as a lever to lift the stone. Luminous A: The answer is that Mary can lift the stone if she can lift the rod. [continued] OPT Answer: Mary can lift the stone by using the rod. [continued] "Mary can not lift a heavy stone by herself. However, she brought a calculator with her. Is Mary able to lift the stone?" No, the calculator is not able to lift the stone. GPT-3 Luminous A: The answer is no. [continued] OPT Mary can lift the stone. Mary can lift the stone. [repeating]

"Mary can not move a heavy stone by herself. However, she brought a small

"Mary can not lift a heavy stone by herself. However, she brought a calculator with her. How can Mary lift the stone?"

GPT-3 Mary can't lift the stone by herself, but she can use the calculator to help her.

Luminous A:

Mary can lift the stone by herself if she can calculate the force she needs to apply to the stone.

[continued]

OPT Answer:

Mary can lift the stone by using the calculator.

[continued]