

## Instructions: Experiment 1

### Version A: Spatial Ability

You will complete 3 tasks that test your perspective taking ability. Perspective taking ability can be thought of as a measure of spatial ability. Spatial ability is a cognitive ability that is defined as understanding the relations between objects in space and being able to mentally manipulate them and respond correctly. Previous studies have shown that males often score higher on measures of spatial ability.

### Task 1: Perspective-Taking Task (SPATIAL)

You will see a picture of an array of objects and an “arrow circle” with a statement below. You will imagine that you are standing at one object in the array and facing another object. Your task is to draw an arrow from the center object showing the direction to a third object from this facing orientation.

Try the example on the first page. In this item you are asked to imagine that you are standing at the flower, and facing the tree. Your task is to draw an arrow indicating the direction from the flower to the cat. In the sample item this arrow has been drawn for you. In the test items, your task is to draw this arrow. Can you see that if you were at the flower facing the tree, the cat would be in this direction?

There are 12 items in this test, one on each page. Please do not pick up or turn the test booklet, and do not make any marks on the maps. You will have 5 minutes for this test. Do you have any questions before you begin?

### Task 2: Money Road Map Task (SPATIAL)

In this test, you will be shown a map of a city with a path drawn through it. Imagine yourself taking a walk through the path. At each turn that the path takes, your task is to decide whether you would turn to your right or your left as you are walking. If it is a right turn, write ‘R’ at the turn, and if it is a left turn, write an ‘L’. Try the practice map on the front page. Please do not pick up or turn the page. The “start” position is on the top of the page. You will have 30 seconds to complete the task.

## Instructions: Experiment 1

### Version B: Empathetic Ability

You will complete 3 tasks that test your perspective taking ability. Perspective taking ability can be thought of as a measure of empathetic ability. Empathetic ability is a social ability that is defined as being able to identify with, and understand what another person is seeing or feeling, and respond appropriately. Previous studies have shown that females often score higher on measures of empathetic ability.

### Task 1: Perspective-Taking Task (SOCIAL)

You will see a picture of an array of objects and an “arrow circle” with a statement below. Imagine standing at the location of the person in the array and taking their perspective. Your task is to draw an arrow from the person’s perspective to show the direction to an object from this facing orientation.

Try the example on the first page. In this item you are asked to imagine that you are taking the perspective of the person and facing the tree. Your task is to draw an arrow indicating the direction to the cat. In the sample item this arrow has been drawn for you. In the test items, your task is to draw this arrow. Can you see that if you were facing the tree, the cat would be in this direction?

There are 12 items in this test, one on each page. Please do not pick up or turn the test booklet, and do not make any marks on the maps. You will have 5 minutes for this test. Do you have any questions before you begin?

### Task 2: Money Road Map Task: (SOCIAL)

In this test, you will be shown a map of a city with a path drawn through it. Imagine yourself taking the perspective of the person on the map. Suppose that one day, you went for walk and followed the path through the city that is shown. At each turn that the path takes, your task is to decide whether you would turn to your right or your left as you are walking. If it is a right turn, write ‘R’ at the turn, and if it is a left turn, write an ‘L’. Try the practice map on the front page. Please do not pick up or turn the page. The “start” position is on the top of the page. You will have 30 seconds to complete the task.

## Instructions: Experiment 2

### Version A: Spatial Ability

**You will complete 2 tasks that test your perspective taking ability. Perspective taking ability can be thought of as a measure of spatial ability. Spatial ability is a cognitive ability that is defined as understanding the relations between objects in space and being able to mentally manipulate them and respond correctly. Previous studies have shown that males often score higher on measures of spatial ability.**

### Task 1: Perspective-Taking Task (SPATIAL)

You will see a picture of an array of objects and an “arrow circle” with a statement below. You will imagine that you are standing at one object in the array and facing another object. Your task is to draw an arrow from the center object showing the direction to a third object from this facing orientation.

Try the example on the first page. In this item you are asked to imagine that you are standing at the flower, and facing the tree. Your task is to draw an arrow indicating the direction from the flower to the cat. In the sample item this arrow has been drawn for you. In the test items, your task is to draw this arrow. Can you see that if you were at the flower facing the tree, the cat would be in this direction?

There are 12 items in this test, one on each page. Please do not pick up or turn the test booklet, and do not make any marks on the maps. You will have 5 minutes for this test. Do you have any questions before you begin?

### Task 2: Money Road Map Task (SPATIAL)

In this test, you will be shown a map of a city with a path drawn through it. Imagine yourself taking a walk through the path. At each turn that the path takes, your task is to decide whether you would turn to your right or your left as you are walking. If it is a right turn, write ‘R’ at the turn, and if it is a left turn, write an ‘L’. Try the practice map on the front page. Please do not pick up or turn the page. The “start” position is on the top of the page. You will have 30 seconds to complete the task.

## Instructions: Experiment 2

### Version B: Empathetic Ability

**You will complete 2 tasks that test your perspective taking ability. Perspective taking ability can be thought of as a measure of empathetic ability. Empathetic ability is a social ability that is defined as being able to identify with, and understand what another person is seeing or feeling, and respond appropriately. Previous studies have shown that females often score higher on measures of empathetic ability.**

### Task 1: Perspective-Taking Task (SPATIAL)

You will see a picture of an array of objects and an “arrow circle” with a statement below. You will imagine that you are standing at one object in the array and facing another object. Your task is to draw an arrow from the center object showing the direction to a third object from this facing orientation.

Try the example on the first page. In this item you are asked to imagine that you are standing at the flower, and facing the tree. Your task is to draw an arrow indicating the direction from the flower to the cat. In the sample item this arrow has been drawn for you. In the test items, your task is to draw this arrow. Can you see that if you were at the flower facing the tree, the cat would be in this direction?

There are 12 items in this test, one on each page. Please do not pick up or turn the test booklet, and do not make any marks on the maps. You will have 5 minutes for this test. Do you have any questions before you begin?

### Task 2: Money Road Map Task (SPATIAL)

In this test, you will be shown a map of a city with a path drawn through it. Imagine yourself taking a walk through the path. At each turn that the path takes, your task is to decide whether you would turn to your right or your left as you are walking. If it is a right turn, write ‘R’ at the turn, and if it is a left turn, write an ‘L’. Try the practice map on the front page. Please do not pick up or turn the page. The “start” position is on the top of the page. You will have 30 seconds to complete the task.

## **Instructions: Experiment 3**

### **Generic instructions (Spatial):**

**You will complete 2 tasks that test your perspective taking ability.**

### **Task 1: Perspective-Taking Task (SPATIAL)**

You will see a picture of an array of objects and an “arrow circle” with a statement below. You will imagine that you are standing at one object in the array and facing another object. Your task is to draw an arrow from the center object showing the direction to a third object from this facing orientation.

Try the example on the first page. In this item you are asked to imagine that you are standing at the flower, and facing the tree. Your task is to draw an arrow indicating the direction from the flower to the cat. In the sample item this arrow has been drawn for you. In the test items, your task is to draw this arrow. Can you see that if you were at the flower facing the tree, the cat would be in this direction?

There are 12 items in this test, one on each page. Please do not pick up or turn the test booklet, and do not make any marks on the maps. You will have 5 minutes for this test. Do you have any questions before you begin?

### **Task 2: Money Road Map Task (SPATIAL)**

In this test, you will be shown a map of a city with a path drawn through it. Imagine yourself taking a walk through the path. At each turn that the path takes, your task is to decide whether you would turn to your right or your left as you are walking. If it is a right turn, write ‘R’ at the turn, and if it is a left turn, write an ‘L’. Try the practice map on the front page. Please do not pick up or turn the page. The “start” position is on the top of the page. You will have 30 seconds to complete the task.

## **Instructions: Experiment 3**

### **Generic instructions (Social):**

**You will complete 2 tasks that test your perspective taking ability.**

### **Task 1: Perspective-Taking Task (SOCIAL)**

You will see a picture of an array of objects and an “arrow circle” with a statement below. Imagine standing at the location of the person in the array and taking their perspective. Your task is to draw an arrow from the person’s perspective to show the direction to an object from this facing orientation.

Try the example on the first page. In this item you are asked to imagine that you are taking the perspective of the person and facing the tree. Your task is to draw an arrow indicating the direction to the cat. In the sample item this arrow has been drawn for you. In the test items, your task is to draw this arrow. Can you see that if you were facing the tree, the cat would be in this direction?

There are 12 items in this test, one on each page. Please do not pick up or turn the test booklet, and do not make any marks on the maps. You will have 5 minutes for this test. Do you have any questions before you begin?

### **Task 2: Money Road Map Task: (SOCIAL)**

In this test, you will be shown a map of a city with a path drawn through it. Imagine yourself taking the perspective of the person on the map. Suppose that one day, you went for walk and followed the path through the city that is shown. At each turn that the path takes, your task is to decide whether you would turn to your right or your left as you are walking. If it is a right turn, write ‘R’ at the turn, and if it is a left turn, write an ‘L’. Try the practice map on the front page. Please do not pick up or turn the page. The “start” position is on the top of the page. You will have 30 seconds to complete the task.