Instructions

Introduction
Experimenter 1: Thank you for coming to participate in our experiment today (introduce self, other experimenter and assistant(s) as well). You are going to perform a series of tasks today. Before each task I will explain the rules of the task and what you can win for participating in the task. You can leave the experiment at any time, but if you leave before the end of the experiment, you will not be able to win any more prizes.

Kids version:
Your teachers and your parents have said that you can play these games if you want, but you do not have to. If you do not want to play our games or do not like the questions we are asking you, let us know and we will take you back to class. So what do you think? Do you want to play our games?

(obtain verbal consent from all subjects)

OK then, why don't you come up and look at the toys you will be playing with.

(show toys)

YA version:
You will be making choices today between different snack foods. We want to make sure you like all of the foods that will be in the experiment.

(show snack foods to subjects one at a time)

If you were to receive any of these snack foods today, would you rather eat them or discard them?

(obtain positive response for all items, otherwise thank them for coming and pay show up-fee)

There is a consent form on your desk. Please sign and date the last page after reading it.

Experimenter 1: Are there any questions before we begin?

Treatment G (Goods)
Demo items:
As to not prejudice the subjects for or against any specific objects, the demo options were different from the experimental objects.
Male children saw demos with girls' toys.
Item1: Plush monster
Item2: Tiniest Pet Shop
Item3: Eraser
Item4: Friendship bracelet
Item5: Animal stamp
Item6: Pencil topper

Female children saw demos with boys' toys.
Item1: Dolphin
Item2: Squid
Item3: Seal

Item4: Crab
Item5: Shark
Item6: Octopus

The YA saw demos with drinks.
Item1: Can of Coke
Item2: Bottle of water
Item3: Cranberry juice
Item4: Orange juice
Item5: Iced tea
Item6: Milk

Experimenter 1: In the first task you are going to be asked to make a series of choices between two options on your tablet. Experimenter 2 is going to help me show you how this task works.

OK this is what Experimenter 2 sees on her tablet (on projector screen, show first screenshot for goods task). This means that she is being asked, "Which toy/drink (for kids/YA, respectively) would you rather have right now? Item 1 or Item 2." So Experimenter 2, which will it be?

Experimenter 2: I'd like Item 1!

Experimenter 1: So you'd rather have Item 1 today?

Experimenter 2: Yes.

Experimenter 1: OK, So Experimenter 2 prefers Item 1 so she is going to press the button above Item 1… the button right here (point to button on projector screen). Next question Experimenter 2 (on projector screen, show second screenshot for goods task), would you rather have Item 3 or Item 4?

Experimenter 2: I'd rather have Item 4!

Experimenter 1: This time Experimenter 2 prefers Item 4, so she will press the button above Item 4 (point to button on projector screen). One last question Experimenter 2 (on projector screen, show third screenshot for goods task), would you rather have Item 5 or Item 6?

Experimenter 2: Hmmm... They both seem pretty great … I'd be equally happy with either of them.

Experimenter 1: You like them both the same?

Experimenter 2: Yes.

Experimenter 1: You wouldn't like one more than the other? Not even a little bit?

Experimenter 2: No, I like them the same.

Experimenter 1: OK, since Experimenter 2 likes them both the same, she will press the button in the middle top of the screen (point to middle button on projector screen). That tells the computer that she likes them both equally. Now the computer looks over all of the things that Experimenter 2 chose and it picks one for her to have right now. (on projector screen, show image of "randomly selected" item from goods task) And it chose Item 4! You get to have Item 4! Here you go!

So now you are going perform the same task as did Experimenter 2, except instead of choosing between the items she saw, you are going to pick between pairs of the toys you saw in the beginning/snack foods you saw in the waiting room. If you prefer the option on the right, press the button above the right option and if you prefer the option on the left, press the button on the left. If you like them both the same, press the button in the middle. And, just like for Experimenter 2, when you are done making all of your choices, one of the choices will really happen. You will be given that toy/snack food at the end of the session today and you will get to take it home with you/eat it in the waiting room.

Since you do not know which choice will come true, it is in your best interest to take all of the choices seriously and always pick your favorite option.

Any questions? (answer questions)

OK, we are going to come around and start the tablets now.

Experimenters and assistant(s): (start task on each subject's tablet)

(wait until everyone has completed task)

Treatment G (Goods) Prime
Experimenter 1: OK, now we are going to do another task with the same items. This time, instead of choosing between the left item or the right item, you are going to use this board (on projector screen, show image of ranking board) that you see on your desk in front of you. And, we are going to hand out this deck of cards and each card has a different one of the toys/snack foods printed on it. What I would like you to do is put your favorite option over here (point to right side of board), your least favorite option over here (point to left side of board), and put them in order from your most favorite to your least favorite item. If you like some of them the same, you can put them in the same section. You can put as many cards as you want in the same section, it's OK to leave sections blank, but you do have to put every card somewhere on the board. Any questions? (answer questions) All right, here come the cards.

Experimenters and assistant(s): (pass out cards then when all have been placed on board by subject, confirm that they are finished arranging the cards and transfer the ranking onto their tablet)

Treatment TR (Transitive Reasoning)
Experimenter 1: This game is called Animal Party (on projector screen, show title screen) and there are two rules in Animal Party. The first rule is that you need to figure out who should wear the hat and the second rule is that the oldest animal at the party always wears the hat. We are going to do a few examples so that you understand how to play the game.

Here's our first example: (show first premise) When tiger, cat, and elephant have a party together, cat is the oldest so she wears the hat. (show second premise) Then when pig and tiger have a party together, tiger is the oldest so she wears the hat. (show response prompt) Now, when cat and elephant are having a party, it's your job to figure out who should wear the hat. Look at this example for a moment and think about who you think should wear the hat, then I will tell you what I think (wait a few seconds). So, I think the hat should go on cat because I noticed that at this party (point to first "party" or first premise) cat was older than elephant, so at this party (point to last "party" or the prompt) cat should still be older than elephant. So I would tap cat (point to cat on screen), a hat would appear above the cat, and then I would tap the green button in this corner (point to right upper corner of screen) to go on to the next question. And, if I tap elephant by

accident, I would tap the red button in this corner (point to left upper corner of screen) to undo my answer and then pick cat, then pick the green button.

One more practice before we start for real: (show first premise) When turkey and hippo have a party together, turkey is the oldest so she wears the hat. (show second premise) Then when duck and bat have a party, duck wears the hat because she is the oldest. (show response prompt) Now, when monkey and hippo have a party, who should wear the hat? Take a look and think about it for a moment and then I will tell you what I think (wait a few seconds). I know that hippo is definitely younger than turkey, but I do not really know anything about monkey. So, I would just say "I don't know who is the oldest." I would press the question mark, a hat would appear above the question mark, and then I would press the green button to go on to the next question. There will always be a question mark option, which you can tap if you do not know who is the oldest or who should wear the hat.

OK, here comes the first real question. Question 1: (show first premise) When kangaroo and chicken have a party, chicken is the oldest so she wears the hat. (show second premise) Then when bee, kangaroo, and chicken have a party, chicken is the oldest so she wears the hat. (show response prompt) Now, when bee and chicken have a party, who is the oldest and should be wearing the hat? If you think chicken is older, put the hat on chicken. If you think bee is older, put the hat on bee. If you are not sure which one of them is older, you can put the hat on the question mark. (wait for everyone to submit response)

OK, next question: (show first premise) When mouse, llama, and lion have a party, mouse is the oldest so she wears the hat. (show second premise) Then when llama and lion have a party, llama is the oldest so she wears the hat. (show response prompt) Now, when llama and mouse have a party, who is the oldest and should be wearing the hat? If you think llama is older, put the hat on llama. If you think mouse is older, put the hat on mouse. If you are not sure which one of them is older, you can put the hat on the question mark. (wait for everyone to submit response)

OK, next question: (show first premise) When giraffe and owl have a party, owl is the oldest so she wears the hat. (show second premise) Then when giraffe and goat have a party, giraffe is the oldest so she wears the hat. (show response prompt) Now, when owl and goat have a party, who is the oldest and should be wearing the hat? If you think owl is older, put the hat on owl. If you think goat is older, put the hat on goat. If you are not sure which one of them is older, you can put the hat on the question mark. (wait for everyone to submit response)

OK, next question: (show first premise) When penguin and beaver have a party, beaver is the oldest so she wears the hat. (show second premise) Then when zebra and beaver have a party, beaver is the oldest so she wears the hat. (show response prompt) Now, when zebra, beaver, and penguin all have a party, who is the oldest and should be wearing the hat? If you think zebra is the oldest, put the hat on zebra. If you think beaver is the oldest, put the hat on beaver. If you think penguin is the oldest, put the hat on penguin. If you are not sure which one of them is the oldest, you can put the hat on the question mark.? (wait for everyone to submit response)

OK, next question: (show first premise) When moose and bunny have a party, moose is the oldest so she wears the hat. (show second premise) Then when sheep and moose have a party, moose is the oldest so she wears the hat. (show response prompt) Now, when sheep and bunny have a party, who is the oldest and should be wearing the hat? If you think sheep is older, put the hat on sheep. If you think bunny is older, put the hat on bunny. If you are not sure which one of them is older, you can put the hat on the question mark. (wait for everyone to submit response)

OK, next question: (show first premise) When pterodactyl and ostrich have a party, ostrich is the oldest so she wears the hat. (show second premise) Then when ostrich and rhino have a party, rhino is the oldest so she wears the hat. (show response prompt) Now, when rhino and pterodactyl have a party, who is the oldest

and should be wearing the hat? If you think rhino is older, put the hat on rhino. If you think pterodactyl is older, put the hat on pterodactyl. If you are not sure which one of them is older, you can put the hat on the question mark. (wait for everyone to submit response)

OK, last question: (show first premise) When peacock and squirrel have a party, peacock is the oldest so she wears the hat. (show second premise) Then when dog and squirrel have a party, dog is the oldest so she wears the hat. (show response prompt) Now, when peacock, squirrel, and dog all have a party, who is the oldest and should be wearing the hat? If you think peacock is the oldest, put the hat on peacock. If you think squirrel is the oldest, put the hat on squirrel. If you think dog is the oldest, put the hat on dog. If you are not sure which one of them is the oldest, you can put the hat on the question mark. (wait for everyone to submit response)

Treatment S (Social)
Kids version:
Experimenter 1: On to the next task. You have been paired with a student from a school across town. The student is also a girl/boy and from your grade. Your job is to tell us how many toys the two of you should split and how you should split it. (on projector screen, show sample screenshot of social task) One thing you could tell us is that you and the other student should split 5 toys such that you get 1 toy and the other student gets 4. Or, you could tell us that you and the other student should split 4 toys, such that you get 4 toys and the other student gets 0 toys. Just like before, if you like the left option more, you press the button on the left, and if you like the right option more, you press the button on the right, and if you like both options the same, you press the button in the middle. One thing I should add is that there are strict rules about telling you something and not doing it. I guarantee that we will be driving over to the other school in the coming weeks and giving the other student exactly as many toys as you tell us to give them. Of all the choices you make, one of them is actually going to come true; the computer is going to look at all of the choices you make and pick one of them to be the one. It is in your best interest to pay close attention to all of the choices because you do not know which choice is going to be the one that matters. The other student has no way to send you toys and they will never know who you are; all they will know is that a student in a different experiment decided that they should get this many toys. Any questions? (answer questions)

Experimenters and assistant(s): (start task on each subject's tablet)

(wait until everyone has completed task)

YA version:
Experimenter 1: On to the next task. We have a lot of USC students that come through here for experiments and for the purpose of this next task, you have been paired with a USC student who is going to come through in the next couple of weeks. And you get to tell us how much money the two of you should split and how you should split it. (on projector screen, show sample screenshot of social task) One thing you could tell us is that you and the other student should split 5 tokens such that you get 1 token and the other student gets 4 tokens - each token is worth 2 dollars - or you could tell us that you and the other student should split 4 tokens, such that you get 4 tokens and the other student gets 0 tokens. Just like before, if you like the left option more, you press the button on the left, and if you like the right option more, you press the button on the right, and if you like both options the same, you press the button in the middle. One thing I should add is that our lab and our field have really strict rules about telling a subject that you are going to give someone money and then not following through. I guarantee you that there is going to be a student coming through in the next couple of weeks and they will get exactly as much money as you tell us to give them. Of all the choices you make, one of them is actually going to come true; the computer is going to look at all of the choices you make and pick one of them to

be the one. It is in your best interest to pay close attention to all of the choices because you do not know which choice is going to be the one that matters. The other student has no way to send you money and they will never know who you are; all they will know is that a student in a different experiment decided that they should get this much money. Any questions? (answer questions)

Experimenters and assistant(s): (start task on each subject's tablet)

(wait until everyone has completed task)

Treatment S (Social) Prime
Experimenter 1: We are now going to hand out another deck of cards. (on projector screen, show image of ranking board). This time, instead of a toy/snack food, each card has one of the split options printed on it. I want you to lay them out on your board, just like before, with your favorite option on one end (point to right side of board), your least favorite option on the other (point to left side of board), and the rest of the options in order from your most favorite to your least favorite. Just like before, it is OK to put multiple cards in the same section if you like them exactly the same, it is OK to leave sections blank, but you do have to put every card somewhere on the board. Any questions? (answer questions) All right, here come the cards.

Experimenters and assistant(s): (pass out cards then when all have been placed on board by subject, confirm that they are finished arranging the cards and transfer the ranking onto their tablet)

Treatment R (Risk)
Experimenter 1: The very last thing that we are going to do before you get your toys/snack food is Experimenter 2 is going to spin a wheel to determine if you get bonus toys/money. Experimenter 2 is going to spin a wheel - if it lands in the green, you get bonus toys/money (demonstrate with one-fourths wheel), if it lands in the white, you do not get bonus toys/money (demonstrate with one-fourths wheel). But, you get to pick what wheel you would like to have Experimenter 2 spin. You can ask Experimenter 2 to spin this wheel (show one-fourth wheel), or you can ask Experimenter 2 to spin this wheel (show five-eighths wheel). This seems like a straightforward enough decision. This wheel (hold up five-eighths wheel) has a lot more green on it so it is much easier to win with this wheel, but there is a little bit more to it than that. (on projector screen, show sample screenshot of risk task). Each wheel has a different amount of toys/money associated with it. So, if you ask Experimenter 2 to spin this wheel for you (point to image of one-fourth wheel on screen) and you win, you get 8 bonus toys/8 tokens, or 16 dollars. But if you ask Experimenter 2 to spin this wheel for you (point to image of five-eighths wheel on screen) and you win, you only get 3 bonus toys/3 tokens, or 6 dollars. Just like before, if you like the option on the left more, press the button on the left. If you like the option on the right more, press the button on the left. If you like or dislike both options equally, press the button in the middle and the computer will choose for you. Also, just like before, of all the choices you make, one of them is actually going to come true; the computer is going to look at all of the choices you make and pick one of them to be the one. Right before you get your toys/snack food, Experimenter 2 is going to spin whichever wheel you tell her to spin and if you win, you will win exactly the amount of bonus toys/money that is associated with that wheel. It is in your best interest to pay close attention to all of the choices because you do not know which choice is going to be the one that matters. Any questions? (answer questions)

Experimenters and assistant(s): (start task on each subject's tablet)

(wait until everyone has completed task)

Treatment R (Risk) Prime
Experimenter 1: We are now going to hand out one last deck of cards. (on projector screen, show image of ranking board). This deck has one of the spin options on each card. Just like before, I would like you to lay them out on your board, with your favorite option on one end (point to right side of board), your least favorite option on the other (point to left side of board), and the rest of the options in order from your most favorite to your least favorite. Just like before, it is OK to put multiple cards in the same section if you like them exactly the same, it is OK to leave sections blank, but you do have to put every card somewhere on the board. Any questions? (answer questions) All right, here come the cards.

Experimenters and assistant(s): (pass out cards then when all have been placed on board by subject, confirm that they are finished arranging the cards and transfer the ranking onto their tablet)

Preparation and distribution of earnings
Experimenters and assistant(s): (explain to subjects what they have earned from each task by reading off of subjects' final screens, which have displayed a randomly selected choice from the goods task, social task, and risk task as well as the subject's elicited favorite option from the goods task)

Assistant: (record earnings onto separate receipt sheets for each subject)

Experimenter 2: (spin wheel one-by-one for each subject)

Assistant: (record wheel spin results on each subject's receipt sheet and hand completed receipt to Experimenter 1)

Experimenter 1: (prepare earnings bag for each subject based on receipts)