**CANTAB SOC Instructions**

Say:

*Let’s move on to the next task. First I will show you how it works, and then I will give you the pen so that you can try.*

Press the spacebar, say:

*You can see that there are two arrangements of colored balls. You can think of them like pool balls hanging in the pockets of a pool table. Your job is to make the bottom arrangement look just like the top. In order to do that, we will have to move this blue ball.*

Point at the blue ball in the bottom arrangement.

*To move a ball, just touch it like this.*

Touch the blue ball. If you do not hear a sound, check speakers.

*You see that it now has a white flashing outline. That means that it is ready to be moved. Now I can move it where it needs to go.*

Move blue ball to complete puzzle.

Say:

*We have made the bottom arrangement look just like the top one, so we are done with this puzzle.*

Press the spacebar, say:

*Here is another puzzle. Let me tell you about a few important rules to this task. First, you cannot move a ball that is beneath another ball, like this green one.*

Touch the green ball several times to show that it cannot be moved.

*The red ball is on top of the green ball blocking it. Imagine if these were real pool balls. In order to move the green ball we would have to move the red ball out of the way first.*

Touch the red ball.

*The red ball is flashing and ready to move, but I actually don’t want to move it. If I touch it again, it will stop flashing and I can select another ball to move*

Touch red ball again to unselect it. Touch blue ball.

Say:

*Also, balls cannot be moved into thin air. They have to be placed at the bottom of the pocket or resting on top of another ball. I have the blue ball selected. I can’t move it to the top of this pocket in order to place another ball beneath it.*

Touch the space just above the blue ball several times to demonstrate that the blue ball cannot be moved ‘up.’ Point to the number on the right hand side of the screen.

*For each puzzle, you will see a number on the right hand side of the screen. This number tells you the number of moves that the puzzle can be solved in. You should always look at this number, then try to solve the puzzle in your head using this number of moves. Once you have the problem solved in your head you should start moving balls. In this case, the number is ‘1.’ That means that we can make the bottom arrangement look just like the top, in just one move. The blue ball is flashing and ready to be moved, so we can just touch here to solve the puzzle.*

Move the blue ball to solve the puzzle.

*This task is not timed, but the computer will stop you and move on to the next problem if you make too many moves. Do you have any questions?*

Answer any questions, hand pen to participant, and hit space bar.

When it says “New Pattern,” hit the space bar to begin next trial. After several trials, it will say “Please Wait.”

Say:

*Now things will change a little bit. When I press the space bar, you should keep your eyes on the top arrangement. The computer will move one ball. All you have to do is copy that move down below. So, if the computer moves the red ball, you will move the red ball to the same location. As soon as you do, quickly look back up at the top because the computer will move another ball. You will continue copying the computer’s moves. Do you have any questions?*

If no questions, press the space bar. When it says “New Pattern,” hit the space bar to begin next trial. After several trials, it will say “Please Wait.”

*Now things will go back to the way they were at first. You will look at the number on the right, try to solve the puzzle in your head in that number of moves, and then start moving balls. Ready?*

Press space bar. After several trials it will say “Please Wait”

*Now we will go back to mimicking the computer. Look at the top arrangement and watch for the first move. Ready?*

Press space bar.