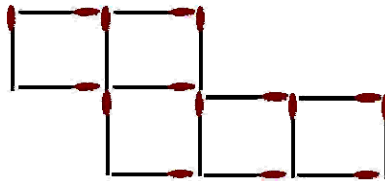


**Chains Puzzle:** You have four chains of three links each, shown below. Your challenge is to take the four chains and form them into one continuous ring while breaking and re-connecting no more than three links. Which three (or less) links do you break and re-connect? When you have the answer, draw arrows to each of the links, and have the experimenter verify your answer.



*The solution to the “Chains” puzzle involves opening all three links on one of the segments and using these three links to connect the remaining segments.*

**Boxes Puzzle:** By repositioning only two of the matches in the following picture, how would you create four squares instead of five? Remember that the squares may be repositioned but the new squares will be the same size as the old ones. When you have the answer, draw the new arrangement of matchsticks, and have the experimenter verify your answer.



*The solution to the “Boxes” puzzle involves repositioning the second (from right) match in the top row and the middle match in the bottom row to form a new box in the top row, third column (this leaves two boxes in the top row (1<sup>st</sup> and 3<sup>rd</sup> columns) and two in the bottom row (2<sup>nd</sup> and 4<sup>th</sup> columns)).*

**Supplementary Figure 1. Puzzles used in Experiment 1 (“chains” and “boxes”)**