

Materials List for

# The Innovation Arena: A Method for Comparing Innovative Problem-Solving Across Groups

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## Materials

Name	Company	Catalog Number	Comments
wooden platform			<b>Dimensions:</b> wooden semicircle, radius approx. 1.5m
<b>FIXATION SYSTEM</b>			
5 x metal nut			<b>Dimensions:</b> M8
5 x rod			(possibly with U-profile)
5 x threaded rod			<b>Dimensions:</b> M8; length: 25cm
5 x wing nut			<b>Dimensions:</b> M8
<b>PUZZLE BOXES WITHOUT FUNCTION PARTS</b>			
20 x acrylic glass back			<b>Dimensions:</b> 17cm x 17.5cm x 0.5cm
20 x acrylic glass base			4 holes for screws roughly 2cm from each side <b>Dimensions:</b> trapezoid : 17.5cm (back) x 15cm (front) x 15cm (sides); 1cm thick
20 x acrylic glass front			acrylic glass fronts need to be cut differently for each puzzle box (see drawing) <b>Dimensions:</b> 17cm x 15cm x 0.5cm
20 x acrylic glass lid			cut out 0.5cm at the edges for better fit <b>Dimensions:</b> trapezoid shape: 18.5cm x 16cm x 16cm x 1cm (thick)
40 x acrylic glass side			<b>Dimensions:</b> 17cm x 16cm x 0.5cm
80 x small screw			to attach bases to the platform (4 screws per base)
<b>PARTS FOR EACH MECHANISM PER TASK</b>			
to assemble the parts use technical drawing InnovationArena.3dm			can be loaded e.g. in 3dviewer.net, which is a free and open source 3D model viewer. github repository:

			<a href="https://github.com/kovacsv/Online3DViewer">https://github.com/kovacsv/Online3DViewer</a> ; please contact authors if you are in need of a different format
<b>TASK TWIST</b>			
5x small nut			to attach glass (punch holes) and acrylic glass cube to threaded rod
acrylic glass			<b>Dimensions:</b> 2cm x 2cm x 1cm
cardboard slant			<b>Dimensions:</b> trapezoid: 17.5cm (back) x 15cm (front) x 17cm (sides)
plastic shot glass			<b>Dimensions:</b> height: 5cm; rim diameter: 4.5cm; base diameter: 3cm
thin threaded rod			<b>Dimensions:</b> length: approx. 10cm
<b>TASK BUTTON</b>			
2x nut			attach to rod; glue outer nut to rod <b>Dimensions:</b> M8
acrylic glass			V-cut to facilitate sliding of rod <b>Dimensions:</b> 4cm x 3cm x 1cm (0.5cm V-cut in the middle)
cardboard slant			<b>Dimensions:</b> trapezoid: 17.5cm (back) x 15cm (front) x 17cm (sides)
threaded rod			<b>Dimensions:</b> M8, length: 5cm
<b>TASK SHELF</b>			
acrylic glass top			<b>Dimensions:</b> 5cm x 4cm x 0.3cm
acrylic glass lower			<b>Dimensions:</b> 5cm x 4cm x 1cm
acrylic glass side 1			<b>Dimensions:</b> 4cm x 3cm x 0.5cm
acrylic glass side 2			<b>Dimensions:</b> 4.5cm x 3cm x 0.5cm
thin plastic bucket			one side cut off to fit <b>Dimensions:</b> diameter: approx. 4.5 cm; height: 1cm
cardboard slant			<b>Dimensions:</b> trapezoid: 17.5cm (back) x 15cm (front) x 17cm (sides)
<b>TASK SLIT</b>			room to reach in: 2cm in height
-			recommended: add small plastic barrier behind reward so it cannot be pushed further into the box
<b>TASK CLIP</b>			
2x acrylic glass			<b>Dimensions:</b> 1cm x 1cm x 2cm
cardboard slant			<b>Dimensions:</b> trapezoid: 17.5cm (back) x 15cm (front) x 17cm (sides)
peg			<b>Dimensions:</b> length: approx. 6 cm
thin threaded rod			<b>Dimensions:</b> length: approx. 6 cm
<b>TASK MILL</b>			
2x acrylic glass triangle			<b>Dimensions:</b> 10cm x 7.5cm x 7.5cm; thickness: 1cm
2x plastic disc			<b>Dimensions:</b> diameter: 12cm
4x small nut			for attachment
7x acrylic glass			<b>Dimensions:</b> 4.5cm x 2cm, 0.5cm
acrylic glass long			position the mill with longer acrylic glass touching lower half of the front (this way the mill can only turn in one direction) <b>Dimensions:</b> 6.5cm x 2cm, 0.5cm
thin threaded rod			<b>Dimensions:</b> length: approx. 4cm
wooden cylinder			<b>Dimensions:</b> diameter: 2cm

<b>TASK SWISH</b>			
2x acrylic glass			<b>Dimensions:</b> 2cm x 1cm x 1cm
4x small nut			for attachment
acrylic glass			<b>Dimensions:</b> 10cm x 2cm x 1cm
cardboard slant			<b>Dimensions:</b> trapezoid: 17.5cm (back) x 15cm (front) x 17cm (sides)
thin threaded rod			<b>Dimensions:</b> length: approx. 7cm
wooden cylinder			<b>Dimensions:</b> diameter: 2cm, cut-off slantwise; longest part: 7cm, shortest part: 5cm
<b>TASK SHOVEL</b>			
acrylic glass			<b>Dimensions:</b> 20cm x 2cm x 1cm
acrylic glass			<b>Dimensions:</b> 7.5cm x 2cm x 1cm
acrylic glass			<b>Dimensions:</b> 5cm x 1cm x 1cm
small hinge			
<b>TASK SWING</b>			
4x nut			<b>Dimensions:</b> M8
acrylic glass			<b>Dimensions:</b> 7.5cm x 5cm x 1cm
cardboard slant			<b>Dimensions:</b> trapezoid: 17.5cm (back) x 15cm (front) x 17cm (sides)
cord strings			<b>Dimensions:</b> 2x approx. 11cm
thin bent plastic			bucket to hold reward; positioned on slant
threaded rod			<b>Dimensions:</b> M8; length: 7cm
<b>TASK SEESAW</b>			
2x acrylic glass			<b>Dimensions:</b> 10cm x 1.5cm x 0.5cm
2x acrylic glass			<b>Dimensions:</b> 4cm x 1.5cm x 0.5cm
acrylic glass			<b>Dimensions:</b> 10cm x 3cm x 0.5cm
acrylic glass			<b>Dimensions:</b> 4cm x 1.5cm x 1cm
small hinge			
<b>TASK PLANK</b>			
cardboard slant			<b>Dimensions:</b> trapezoid: 17.5cm (back) x 15cm (front) x 17cm (sides)
thin tin			bent approx. 1cm inside box <b>Dimensions:</b> 6.5cm x 3cm
<b>TASK CUP</b>			
plastic shot glass			<b>Dimensions:</b> height: 5cm; rim diameter: 4.5; base diameter: 3cm
<b>TASK FLIP-BOX</b>			
2x acrylic glass triangle			<b>Dimensions:</b> 7cm x 5cm x 5cm; thickness: 0.5cm
2x acrylic glass			<b>Dimensions:</b> 4.5cm x 5cm x 0.5cm
2x acrylic glass			<b>Dimensions:</b> 7cm x 1cm x 1cm
small hinge			
<b>TASK SLIDE</b>			
4x acrylic glass			<b>Dimensions:</b> 15cm x 1cm x 0.5cm
acrylic glass door			<b>Dimensions:</b> 6cm x 6cm x 0.5cm
<b>TASK DJ</b>			
2x small nut			for attachment
acrylic glass			same as box bases

			<b>Dimensions:</b> trapezoid : 17.5cm (back) x 15cm (front) x 15cm (sides); 1cm thick
plastic disc			<b>Dimensions:</b> diameter 12cm
thin threaded rod			<b>Dimensions:</b> length: approx. 3cm
<b>TASK WIRE</b>			
acrylic glass			<b>Dimensions:</b> 9.5cm x 9.5cm x 0.5cm
acrylic glass			<b>Dimensions:</b> 12cm x 2cm x 1cm
2x small hinge			
wire from a paperclip			
<b>TASK TWIG</b>			
2x small hinge			
acrylic glass			<b>Dimensions:</b> 5cm x 1cm
cardboard slant			<b>Dimensions:</b> trapezoid: 17.5cm (back) x 15cm (front) x 17cm (sides)
white cardboard			<b>Dimensions:</b> 13cm x 4cm
Y-shaped twig			<b>Dimensions:</b> length: approx. 14cm
<b>TASK COVER</b>			
acrylic glass			same as box bases <b>Dimensions:</b> trapezoid : 17.5cm (back) x 15cm (front) x 15cm (sides); 1cm thick
thin plastic			<b>Dimensions:</b> diameter: 5cm
<b>TASK BITE</b>			recommended: put tape on sides of platform the keep reward from falling off
2-3 paper clips			
2x cutout from clipboard			<b>Dimensions:</b> 10cm x 3cm
acrylic glass			hole in middle <b>Dimensions:</b> 5cm x 3cm x 1cm
toilet paper			
<b>TASK DRAWER</b>			
2x acrylic glass			<b>Dimensions:</b> 5cm x 2.5cm x 0.5cm
2x acrylic glass			<b>Dimensions:</b> 4cm x 3cm x 1cm
acrylic glass			hole approx. 2 cm from front <b>Dimensions:</b> 5cm x 5cm x 1cm
<b>OTHER MATERIAL</b>			
wide-angle videocamera			