

Field (Green) or Dragon Fire
(Yellow)..... 0 Points
(Optional)..... 1 Point
for hitting the Planet.

Castle (White) 10 Points

Dragon Wings Black...
10 Points

Bridge (Brown)..... 15 Points

All Engines (Brown)...
20 Points

Castle Door or
Windows (Black)... 30 Points

Dragon Body (Red)...
30 Points

Crown (Yellow)..... 50 Points

Penalties

Moat (Blue).....- 5 Points

Our Miners (White)...
-15 Points

Rules

1.) All Engines and Launchers must be behind Firing Line. Being ahead of the line disqualifies the shot. Repeats disqualify the Crew for the competition.

2.) You have a 5 minute time limit per Round for 6 shots.

3.) Rounds are not added together. Only the best Round counts.

4.) You may adjust your Engine between shots. Adults may assist Juniors, within reason.

5.) Shots gripping more than one scoring area get the HIGHER Score.

6.) Shots knocked off the Target count as 0 Points.

7.) Adults shoot from a further distance than Juniors.

8.) Limit 5 Entries.

9.) Judges will maintain the Score and Rules; All decisions are final.

10.) Prizes for Juniors will be First, Second, And Third. First gets first choice, Second goes second, and Third goes third. Adults only First Prize will be issued. Prizes will be awarded at Court.

11.) Do Not shoot Balls at People or Pets! Velcro™ may injure Eyes!

Notes & Addendum

I made this game up about 9 years ago for my stepdaughters and the original wore out from use rather than storage. The original used Slingshots and after its first exposure I had to pry the Adults away so the kids could have fun. This is the Second Generation and improved only in ruggedness as no other corrections were needed to have fun. The Target is big enough to make it easy but, has both good and bad shots. I warn you it's addictive.

This design and concept may be copied, reproduced, and distributed by anyone as long as it is not used for Personal or Profit Oriented Company profits. It is entirely created for entertainment and education of young and old, and is gladly donated to all who wish to enjoy and use it. Variants are welcome, so long as the Spirit is maintained.

Test your Engines and distances; and vary your distances accordingly. I have used this Idea with everything from Mini-Trebs to Sling shots. Miniature Piston and Rubber band Driven Cannon work as well as Mini-Onagers. To get sufficient range you should use hard, hollow, Plastic Balls with

“Hook Side” out Velcro™. These are usually available for discount and “Dollar Stores” for a dollar or two U.S. in batches of six.

Don't limit Engine Designs and they only need to be a couple of Foot/Pounds or so to get nice range. Even Popsicle Stix™ Engines can work just, as a Judge, review/test them for Safety and give them a reasonably challenging distance. As judge, you can set as many criteria as you need. Just remember that how you treat a Junior, is how you develop our future. Rubber Band Slingshots are a last resort but, they still get the Idea of missiles across.

My target is 5' by 5' and all parts are of Craft Felt. Alpacas may be glued or Stitched on. Mine are now Stitched. Again, variants are welcome and encouraged. Just try to make sure there are enough but, not too many, scoring areas. There should be some “Bad Shots” to emphasize accuracy and make the Target interesting. About 50% of my Target is Neutral and 10% is Negative. The rest is scoring. Only about 3% is for Highest Score.

My Launchers are Mini-Onajers. The Base/Chassis is 10” long by 5-1/2” wide. The spreaders are 4” long and all are made of 1” by 2”. The ends are simple Butt Joints as in this size the Forces are quite

light. The Base is made of Select Pine about \$.88 for 4'. The Bridge is 6" tall from the bottom of the Base. The Arm is a cut down Wooden Spoon from a "Dollar Store" 3 for \$.99 It is 8-1/2" long I notched it about 3/4" up from the end for the Engine to get a firm grip. These Spoons may come in extending lengths just cut down one as needed and give the extras to your Kitchen Warrior.

The Bridge is 3/4 square Hardwood all joining points are fitted for strength (See photos). The BACK EDGE of the uprights should be 3-1/2 " from the Front of the Base. (All critical measurements are made from the Front) once assembled and installed add the Spreader (4") flush with the bottom. At 4-1/2" drill a hole on each side centered and 5/8" diameter and a 3/16" hole centered just behind at 5-1/4". These are for the Engine and Pawl Pins.

Rip a 30 degree angle on a piece of the 3/4" hardwood. (optional) 5-1/2" long. Drill into this face and through to fit a small Furniture Leveler. The result will give you a 30 degree downward tilt to your adjustable stop. Cutting the rip makes the drilling process easier. Install the Bumper about 5/8" up from the Base/Bridge Joint on the back of the Bride with the adjuster facing rearward and down.

I predrilled all nail points to avoid splitting and both nailed and glued all joints.

The Engine itself is 7, 3-1/2" by 1/2" Rubber Bands. Pass a strong cord through the bands and pass both ends through the base seat the 1-3/4" by 1/4" Oak Dowel Crank in one end and pull through enough to snug up the Crank. Then have someone hold the Chassis while you stretch the bands the rest of the way through. This requires about a 40 pound pull! Work in the other crank and let settle back against the Frame. Slowly slip the cord out.

This is the time while the bands are straight to insert the Arm. Set it in the middle with the notch about half way through. The bands will hold it in position with no problem.

The Pawl Pins on my engines are 1/8 square mild Steel. They are "L" shaped and measure 1-1/2" by 1/2". Insert them from the INSIDE, long end through. Don't push them all the way through yet.

Twist both Cranks forward to start to set the tension turning both 3 turns at the same time. Friction should hold them in place at this point. Extend the Pawls and the do one side at a time 3 turns with the Pawl retracted. At this point the Pawl IS needed to keep

the Engine from unwinding. This works well for me but, adjust yours to taste. Just remember it needs to be “Kid Safe”. Adjust the Bumper to taste as well. Test until you are satisfied. Then Pry it out of your Hand. I made 3 in about 2 hours at a cost of less than \$4 each.

For me it works best if I put my Thumb and Forefinger on each side of the Ball as I pull back. Your “Eye” comes in real fast. Enjoy and Share.

The following are some pictures to help you along.

Graywolf





