**Geometry for the 2014 GED Resources:**

**Worksheets:**

Identifying 3d shapes and their (unfolded) nets.

<http://www.mathworksheets4kids.com/solid-shapes.html>

including –

* Given net (unfolded shape) name the 3d shape
* Matching 3d shapes to nets.

Surface area of 3d shapes

<http://www.mathworksheets4kids.com/surface-area.html>

**Resources for Geometry Problem Solving:**

These are fodder for problem solving activities. Use the images or content to create problems for your students.

|  |  |  |
| --- | --- | --- |
| Shape | Notes | Link |
| Rectangular prismSurface Area | Art on trucks – how much room for art? (Consider what sides would be in accessible/ unseeable) | <http://bedtimemath.org/fun-math-art-on-trucks/> |
| Rectangular prismVolume? | Chocolate Legos - What volume of chocolate bricks? # of bricks to make something else? Given volume of chocolate, how tall is stack of bricks?  | <http://bedtimemath.org/fun-math-chocolate-legos/> |
| Rectangular Prism | Giant Jenga | <http://bedtimemath.org/fun-math-construction-vehicle-jenga/> |
| Rectangular prismSurface Area? | Box for shipping – Students might be asked to find:Size of boxesCardboard needed for boxPercent difference between two boxes | <http://bedtimemath.org/fun-math-giant-slipper/><http://www.dailymail.co.uk/news/article-2051081/Tom-Boddingham-slipper-Decimal-point-error-sees-size-size-1-450-order-China.html> |
| Rectangular prismCylinder  | Trees to boardsVolume | <http://bedtimemath.org/wall-to-wall-trees/> |
| Rectangular Prism | Given some of this data, students might be asked to find:-Volume of tank or one of the dimensions-Volume per fishetc. etc. | <http://bedtimemath.org/fun-math-large-fish-tank/> |
| Cone | Walk-a- taco Volume | <http://minnesota.cbslocal.com/2011/03/22/walk-a-taco-added-to-target-field-menu/><http://minnesota.twins.mlb.com/news/press_releases/press_release.jsp?ymd=20110322&content_id=17058094&vkey=pr_min&fext=.jsp&c_id=min> |
| Rectangular prism | Largest rectangular prism on one piece of paperWhat questions can we ask our students to make this as useful as possible?Offer table of length, width, height, volume and surface area? | <http://matharguments180.blogspot.com/2014/10/280-rectangular-nets-of-maximum-size.html> |
| Cone and sphere | Would a melted scoop of ice cream fit in the cone?  |  |
| Cylinder and spheres | VolumeSecond link has scaffolded questions. | Based on: <http://blog.mrmeyer.com/2013/makeover-meatballs/><http://algebrasfriend.blogspot.com/2013/07/makeovermonday-will-sauce-spill-over.html> |
| Rectangular prism | Surface area– file cabinet/ post it notes | <http://www.101qs.com/518-file-cabinet--act-1> |
| Rectangular Prism | Dan Meyers 3 act lesson“Which of four packages uses the least amount of packaging? Which uses the least amount of ribbon?” | <http://blog.mrmeyer.com/category/3acts/> |
| Cylinder | Dan Meyers 3 act lessonVolume? There is also a ration question here. | <http://www.101qs.com/3043-nanas-lemon-water> |

**Other Resources:**

Rectangular Prism Nets:

 <http://matharguments180.blogspot.com/2014/09/256-nets-rectangular-prism.html>

Estimation 180:

Visual estimation activities, various math concepts

<http://www.estimation180.com/>

Math Assessment Project :

incredible, ready to go Common Core aligned lessons, high interest, higher order thinking, free.

Check out one on rectangular prisms called **Packing It In** <http://map.mathshell.org/materials/lessons.php>

Fawn Nguyen :

Lesson on surface area and volume using a doughnut.

<http://fawnnguyen.com/i-am-a-doughnut/>

Yummy Math

Mathematics relevant to our world today

<http://www.yummymath.com/>

Robert Kaplinsky

Engaging open ended prompts

<http://robertkaplinsky.com/>

2014 Formula Sheet:

<http://www.gedtestingservice.com/uploads/files/03826c3fc0c714c06667b83ce44b53b7.pdf>

Challenge problems:

Rectangular prism: <http://www.openmiddle.com/rectangular-prism-surface-area-versus-volume/>

Triangles and 3d shapes: <http://fivetriangles.blogspot.com/2013/05/68-volume-of-solid.html>

Three Act Lessons: <http://blog.mrmeyer.com/2011/the-three-acts-of-a-mathematical-story/>

Examples of foam 3-D shapes to purchase:

* [http://www.amazon.com/Didax-Easyshapes-3D-Geometric-Shapes/dp/B000XO4HNY/ref=sr\_1\_3?ie=UTF8&qid=1420594889&sr=8-3&keywords=foam+shapes+3d](http://www.amazon.com/Didax-Easyshapes-3D-Geometric-Shapes/dp/B000XO4HNY/ref%3Dsr_1_3?ie=UTF8&qid=1420594889&sr=8-3&keywords=foam+shapes+3d)
* <http://www.reallygoodstuff.com/easy-shapes-geometric-shapes/p/152134/?cvsfa=4492&cvsfe=2&cvsfhu=313532313334&gclid=Cj0KEQiArK6lBRC5-_jv48uxgrgBEiQAuxdZ9cZy6XfTGvr2F0y3wkudQVzBomRpdu2Cnt9tLZSVWzkaAjgK8P8HAQ>