

BONNEVILLE POWER ADMINISTRATION (BPA) DEVISES METRIC PYRAMID FOR USE AS AN EMPLOYEE METRIC TRAINING AID

The BPA Metric Pyramid was developed by the Department of Energy's Bonneville Power Administration, Portland OR, to furnish metric training instructors with a practical, easy-to-use list of the most common inch-pound-to-metric conversion factors, plus a list of the correct symbols (short forms) used for the metric-system units. The pyramid is proving invaluable in training BPA employees to use SI.

Permission to reproduce the BPA Metric Pyramid was given USMA by BPA's Milton J. Brown, Assistant to the Vice President, Engineering Services. Brown indicated that Leonard E. Sosnovske (a USMA member) was BPA's metric coordinator during the time the pyramid concept was originated. Brown states that Sosnovske retired from BPA late in 1994.

Training instructors and teachers at all grade levels will find the pyramid an extremely useful reference item.

NOTE: It is recommended that the pattern for the BPA Metric Pyramid (given on the reverse side of this page) be reproduced by copying it on a little-heavier paper which is known as card stock.

Cut along the outline of the pyramid and follow the instructions for how to fold and tape it into a useful, handy item which will provide good reference material.

The BPA printed it on a variety of colors of card stock to give employees a choice of colors, and to make it an attractive desk-top ornament.

**USE A COPIER TO REPRODUCE THE DIAGRAM
GIVEN ON THE REVERSE SIDE OF THIS PAGE**

(preferably on card-stock paper)

**Cut along the outline & follow instructions
for folding and taping it
into an attractive desk-top metric-data pyramid**

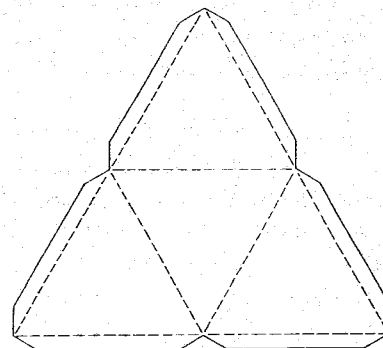
For Training Instructors, Teachers, Individuals

[follow instructions given on the reverse side of this page]

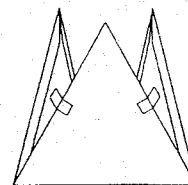
This material was obtained by Max Tinsley, USMA Washington DC liaison representative

USMA tenders its thanks to the BPA for permission to share this excellent training aid with *Metric Today* readers

BPA Metric Pyramid



Cut out along outside border. Fold on dotted lines illustrated above.



Fold up sides from base and tape.

Length

1 inch = 25.4 mm
 1 inch = 2.54 cm
 1 foot = 0.3048 m
 1 yard = 0.9144 m
 1 mile = 1.6 km

Mass or Weight

1 ounce = 28 g
 1 pound = 0.45 kg
 short ton (2,000 lbs.) = 0.9 t

BPA Metric Pyramid

Each edge of the pyramid measures 10 cm or 100 mm.

Volume

1 teaspoon = 5 mL
 1 tablespoon = 15 mL
 1 cup (8 oz.) = 0.24 L
 1 quart (32 oz.) = 0.95 L
 1 gallon = 3.78 L
 1 cubic ft. = 0.028 m³
 1 cubic yd. = 0.76 m³

Temperature

$F = \frac{9}{5}C + 32$
 $C = \frac{5}{9}(F - 32)$

Area or Surface

1 sq. in. = 645 mm²
 1 sq. ft. = 0.09 m²
 1 sq. yd. = 0.84 m²
 1 acre = 2.6 km²
 1 acre = 4047 m²
 1 acre = 0.004 km²

Metric Abbreviations

mm millimeter
 cm centimeter
 m meter
 m² square meter
 m³ cubic meter
 km kilometer
 g gram
 kg kilogram
 metric ton
 mL milliliter
 L liter
 tonne

Energy

1 BTU (60° F) = 1055 J
 1 calorie (15°C) = 4.19 J
 1 kWh = 3.6 x 10⁶ J