A&W Math 10
Wednesday, October 12, 2016

1. Survey - how did you get to school?
2. 2.6/2.7 notes
3. 2.6/2.7 questions
   Quiz Friday

Teacher: How many people walked to school?   How many people walked part way to school?   How many people rode their bike, school bus, public transit, car pool, or car?

Student: Is this for the school?
Teacher: Yes.   It is something that the CRD is looking at to see how kids get to school in this area.

We are moving to the next section.   This is more stuff on conversions.   We are still converting lengths.   You still need your formula sheet.

To help with conversions you get a conversion chart in your data booklet.
[On overhead.]
Ex: $1\ m = 100\ cm$ *This is not on the conversion sheet.

Teacher: You can use the staircase to convert meters to

centimeters.

When you go left to right.   For example $1\,foot = 12\,inches$
When going left to right, you multiply.

If you are going right to left. $inches \rightarrow feet.$ Divide

Let's move on to the examples.

Ex. 1) How many centimeters are in 5 feet?   Determine
what you are doing?
         ft → cm   1 foot = 30.48 cm

I am moving <u>left to right</u> so I will <u>multiply.</u>

         $5\,ft \times 30.48$ cm $= 152.5$ cm

Ex. 2) *How* many yards are in 100 meters?

         $m \rightarrow yd$ $1yd = 0.9144\,m$

We are going <u>meters to yards</u>.   That is right to left so
you <u>divide</u>.

$100m \div 0.9144\,m = 109.3\,yds$

Mixed units need to be made into one unit before they are

converted.

Ex. 3).   How many meters are in 5'10"?

$$5' \ 10" = 5 \ ft \ 10 \ in$$

I will convert 5' into inches and then add it to the other inches.

$$1ft = 12 \ in$$
$$5ft \times 12 \ in = 60 \ in$$
$$60 \ in + 10 \ in = 70 \ in$$

Now convert from inches into meters.

$$in \to m \qquad\qquad 1 \ in = 2.54 \ \text{cm} \quad 1m = 100 \ \text{cm}$$

This conversion requires two steps.

$in \to \text{cm}$
$70 \ in \times 2.54cm$
$= 177.8cm$

$m \leftarrow cm$ This requires you to divide

$177.8cm \div 100 \ \text{cm}$
$= 1.778 \ m$

Ex. 4) How many yards are in 185 cm?

$$\text{cm} \rightarrow yd \qquad 1) \qquad 1m = 100\text{cm} \qquad\qquad 1\ yd = 0.9144m$$
$$185\text{cm} \div 100\text{cm} \qquad 1.85m \div 0.9144m$$
$$= 1.85\ m \qquad\qquad\quad = \ 2.02\ yd$$

[On overhead.]

* left to right $\rightarrow \times$

$*$ right to left $\rightarrow \div$

Teacher: Start going through practice 2.6/2.7
I will go over any of the ones you get stuck on.

I am putting the marks up at the back.   If you are missing something you can check.   There is a back part to it so you will have to flip over to the second page.

Student: When do report cards come?
Teacher: November 10 is the cut off.

Student: I will have my project done by then.
Teacher: Have it done before that.   The project is worth the most marks.

[Handing back work.]   Once I am done handing back your work, I will go over some of the questions.   Try to

do them yourself.
[Students working.]

Teacher: Okay let's go over some of these.

2.6/2.7
Practice
1. Circle the greater measurement in each pair.
A) 6 *in or* 10 cm
b) 5 *ft or* 125 cm
c) 10 *yd or* 10 *m*
d) 25' *or* 8*m*

2. What number would you multiply by to make each conversion?

a) *feet* → *meters*:   0.31
b) *yards* → *m*   0.91
c) *miles* → *kilometer*   1.61
d) *inches* → cm   2.54

3.   Express each measurement in centimeters.   Round your answers to tenths.

a) 8 *in* ≈   1 *in* = 2.54 cm   8 × 2.54 = 20.32
b) 16 ¾ *in* ≈ 16.75*in* × 2.54 = 42.545 cm

c) 2 *ft* 3 ½ *in* ≈ 2 *ft* × 12 *in* = 24 *in* + 3.5 *in* = 27.5*in*

$$27.5 \times 2.54 = 69.85 \; cm$$

d) 4 *yd* ≈ 364 cm

$16d = 0.91m$ $\qquad$ $4 \times 0.91m = 3.64 \; m \times 100\text{cm} = 364 \text{ cm}$

Teacher: Continue working on the next questions.