1) Student created figure
2) Surface area $=2(\mathrm{lw}+\mathrm{hl}+\mathrm{hw})$

$$
=2(4 \cdot 16+10 \cdot 16+10 \cdot 4)
$$

$$
=2(64+160+40)
$$

$$
=2(264)
$$

$$
=528 \mathrm{in}^{2}
$$

3) One possible net:


| Shape/Face | Area Formula | Formula with Values | Area (unit ${ }^{2}$ ) |
| :--- | :--- | :--- | :--- |
| rectangle/front | $\mathrm{A}=\mathrm{l} \bullet \mathrm{w}$ | $\mathrm{A}=16 \bullet 10$ | $160 \mathrm{in}^{2}$ |
| rectangle/back | $\mathrm{A}=\mathrm{l} \bullet \mathrm{w}$ | $\mathrm{A}=16 \cdot 10$ | $160 \mathrm{in}^{2}$ |
| rectangle/top | $\mathrm{A}=\mathrm{l} \bullet \mathrm{w}$ | $\mathrm{A}=4 \cdot 16$ | $64 \mathrm{in}^{2}$ |
| rectangle/bottom | $\mathrm{A}=\mathrm{l} \bullet \mathrm{w}$ | $\mathrm{A}=4 \bullet 16$ | $64 \mathrm{in}^{2}$ |
| rectangle/left side | $\mathrm{A}=\mathrm{l} \bullet \mathrm{w}$ | $\mathrm{A}=4 \bullet 10$ | $40 \mathrm{in}^{2}$ |
| rectangle/right side | $\mathrm{A}=\mathrm{l} \bullet \mathrm{w}$ | $\mathrm{A}=4 \bullet 10$ | $40 \mathrm{in}^{2}$ |

Total area: $160+160+64+64+40+40=528$ in $^{2}$
4) $\underline{A}$ is not a net for a rectangular prism. $\underline{B}$ is a net for a rectangular prism.
5) One possible net:


| Shape/Face | Area Formula | Formula with Values | Area (units ${ }^{2}$ ) |
| :--- | :--- | :--- | :--- |
| rectangle/top | $\mathrm{A}=\mathrm{l} \cdot \mathrm{w}$ | $\mathrm{A}=4 \cdot 3$ | $12 \mathrm{~cm}^{2}$ |
| rectangle/front | $\mathrm{A}=\mathrm{l} \cdot \mathrm{w}$ | $\mathrm{A}=2 \cdot 4$ | $8 \mathrm{~cm}^{2}$ |
| rectangle/left side | $\mathrm{A}=\mathrm{l} \cdot \mathrm{w}$ | $\mathrm{W}=2 \cdot 3$ | $6 \mathrm{~cm}^{2}$ |
| rectangle/back | $\mathrm{A}=\mathrm{l} \cdot \mathrm{w}$ | $\mathrm{A}=2 \cdot 4$ | $8 \mathrm{~cm}^{2}$ |
| rectangle/bottom | $\mathrm{A}=\mathrm{l} \cdot \mathrm{w}$ | $\mathrm{A}=3 \cdot 4$ | $12 \mathrm{~cm}^{2}$ |
| rectangle/right side | $\mathrm{A}=\mathrm{l} \cdot \mathrm{w}$ | $\mathrm{A}=2 \cdot 3$ | $6 \mathrm{~cm}^{2}$ |

Total area $=12+8+6+8+12+6=52 \mathrm{~cm}^{2}$
Surface area $=2(\mathrm{lw}+\mathrm{hl}+\mathrm{hw})$

$$
\begin{array}{ll}
\mathrm{l}=4 \mathrm{~cm} & \mathrm{w}=3 \mathrm{~cm} \quad \mathrm{~h}=2 \mathrm{~cm} \\
\text { Surface area } & =2(4 \bullet 3+2 \bullet 4+2 \cdot 3) \\
& =2(12+8+6) \\
& =2(26) \\
& =52 \mathrm{~cm}^{2}
\end{array}
$$

6) Surface area $=2(\mathrm{lw}+\mathrm{hl}+\mathrm{hw})$

$$
\begin{array}{ll}
\mathrm{l}=18 \text { in } & \mathrm{w}=14 \mathrm{in} \quad \mathrm{~h}=8 \mathrm{in} \\
\text { Surface area } & =2(18 \cdot 14+8 \cdot 18+8 \cdot 14) \\
& =2(252+144+112) \\
& =2(508) \\
& =1016 \mathrm{in}^{2}
\end{array}
$$

National Center \& State Collaborative (NCSC), Human Development Institute, University of Kentucky. The UDL Instructional Unit resources are available for teacher use. Please note that these materials will be revised as user-feedback is obtained and will be made available on SharePoint and the Wiki.

