## FORMING AN IMAGE WITH PIXELS

This activity will enable you to form an image in the smae way that Landsat, Voyager, and other spacecraft send information from space to form images. To do this, however, you must carefully follow directions.

## Directions

1. Put an " $X$ " in these squares:

$$
\begin{aligned}
& 10-\mathrm{A}, \mathrm{G}, \mathrm{~J}, \mathrm{~K}, \mathrm{~L}, \mathrm{M}, \mathrm{~N}, \mathrm{O}, \mathrm{U} \\
& 11 \text { - A, G, I, T, V } \\
& 12 \text { - A, G, J, K, L, M, N, S, W } \\
& 13 \text { - A, G, O, R, S, T, U, V, W, X } \\
& 14 \text { - B, C, D, E, F, I, J, K, L, M, N, Q, Y }
\end{aligned}
$$

2. If you are satisfied that everything has been done correctly, go back and shade in each square that you marked with an " $X$ ".
3. Use the same sheet of graph paper and put an " $X$ " in the following squares:

| $1-N$ | $14-G, K, L, P, Q, U$ | $27-G, H, T, U$ |
| :--- | :--- | :--- |
| $2-M, O$ | $15-G, K, Q, U$ | $28-G, U$ |
| $3-L, P$ | $16-G, K, Q, U$ | $29-F, V$ |
| $4-K, Q$ | $17-G, K, Q, U$ | $30-\mathrm{E}, \mathrm{W}$ |
| $5-K, Q$ | $18-G, K, Q, U$ | $31-\mathrm{D}, \mathrm{N}, \mathrm{X}$ |
| 6-K, Q | $19-\mathrm{G}, \mathrm{K}, \mathrm{Q}, \mathrm{U}$ | $32-\mathrm{D}, \mathrm{N}, \mathrm{X}$ |
| $7-\mathrm{I}, \mathrm{K}, \mathrm{Q}, \mathrm{S}$ | $20-\mathrm{G}, \mathrm{K}, \mathrm{Q}, \mathrm{U}$ | $34-\mathrm{D}, \mathrm{N}, \mathrm{X}$ |
| $8-\mathrm{H}, \mathrm{J}, \mathrm{K}, \mathrm{Q}, \mathrm{R}, \mathrm{T}$ | $21-\mathrm{G}, \mathrm{K}, \mathrm{Q}, \mathrm{U}$ | $35-\mathrm{G}, \mathrm{K}, \mathrm{N}, \mathrm{Q}, \mathrm{U}$ |
| $9-\mathrm{G}, \mathrm{K}, \mathrm{Q}, \mathrm{U}$ | $22-\mathrm{G}, \mathrm{K}, \mathrm{Q}, \mathrm{U}$ | $36-\mathrm{G}, \mathrm{K}, \mathrm{N}, \mathrm{Q}, \mathrm{U}$ |
| $10-\mathrm{G}, \mathrm{K}, \mathrm{Q}, \mathrm{U}$ | $23-\mathrm{G}, \mathrm{K}, \mathrm{Q}, \mathrm{U}$ | $37-\mathrm{G}, \mathrm{K}, \mathrm{Q}, \mathrm{U}$ |
| $11-\mathrm{G}, \mathrm{K}, \mathrm{Q}, \mathrm{U}$ | $24-\mathrm{G}, \mathrm{K}, \mathrm{Q}, \mathrm{U}$ | $38-\mathrm{G}, \mathrm{K}, \mathrm{Q}, \mathrm{U}$ |
| $12-\mathrm{G}, \mathrm{K}, \mathrm{N}, \mathrm{Q}, \mathrm{U}$ | $25-\mathrm{G}, \mathrm{J}, \mathrm{R}, \mathrm{U}$ | $39-\mathrm{H}, \mathrm{I}, \mathrm{J}, \mathrm{R}, \mathrm{S}, \mathrm{T}$ |

4. Fill in these squares completely:
B-35 to 40
C -18 to 25,32 to 40
D - 16 to 27,30 to 39
E-15 to 33,36 to 39
F - 14 to 30,36 to 39
G-13 to 26,35 to 38
H-12 to 25,27 to 31,34 to 36
I-11 to 22,25 to 35
J-11 to 21, 23 to 33
K -11 to 19,22 to 32
L-10 to 17,20 to 32
M-10 to 16,18 to 32

$$
\begin{aligned}
& \mathrm{N}-10 \text { to } 14,17 \text { to } 32 \\
& \mathrm{O}-10 \text { to } 13,15 \text { to } 31 \\
& \mathrm{P}-9 \text { to } 11,14 \text { to } 31 \\
& \mathrm{Q}-7 \text { to } 10,12 \text { to } 31 \\
& \mathrm{R}-6 \text { to } 9,12 \text { to } 30 \\
& \mathrm{~S}-4 \text { to } 8,12 \text { to } 29 \\
& \mathrm{~T}-3 \text { to } 6,13 \text { to } 28 \\
& \mathrm{U}-2 \text { to } 5,14 \text { to } 27 \\
& \mathrm{~V}-2 \text { to } 5,8 \text { to } 9,16 \text { to } 25 \\
& \mathrm{~W}-1 \text { to } 8,18 \text { to } 24 \\
& \mathrm{X}-1 \text { to } 7
\end{aligned}
$$



