## Pig Pen Cipher

Overview: The Pig Pen cipher is of the most historically popular ciphers. It was used by Freemasons a century ago and also by Confederate soldiers during the Civil War. Since it's so popular, it's not a very good choice for topsecret messages. Lots of people know how to use this one! It starts with shapes: tic-tac-toe grids and X shapes. I really like it because coded messages look like they're written in an entirely different language!

## Materials

- Pencil
- Paper

Activity: First, you'll need to make the encoding key for your message. You'll need these four images to start with:

$1^{\text {st }}$ pig pen

$2^{\text {nd }}$ pig pen


3rd pig pen

$4^{\text {th }}$ pig pen

Now place one letter in each "pen" like this:


You can put any letters in any pen - the more random you are, the harder it is to break.
I've got a message here: "MEET AT DOCK ON FRIDAY"
For instance C is enclosed by $\square$, that would be the symbol for C
$P$ is enclosed by $\quad \_$, that would be the symbol for P
The symbol for Z is $\quad$ while that for R will be $\square$
Using these criteria, the cipher will be:


Make sure your friend knows the key when you give them the code!

Now it's your turn! Work out the exercises below. (You'll find answers at the back of this book.)

## Exercises

1. What's the difference between the second and the fourth pig pen?

Draw the following:
2. The third pig pen
3. The first pig pen

Using the following pig pen key, encode \#4-7:

| I | C | A |
| :---: | :---: | :---: |
| E | H | F |
| G | B | D |


4. GO TO SCHOOL
5. COME BACK
6. I WILL SLEEP LATER
7. NORTHERN AMERICA

Using the pig pen key, decode the following messages:

| C | D | U |
| :---: | :---: | :---: |
| B | A | E |
| F | G | H |


8.

9. $\lceil\square \square \square\rangle \square \square \square \square \square$

## Answers to Exercises: Pig pen Cipher

1. The second pig pen is composed of a cross while the fourth one is composed of the cross with dots.
2. A

| $\theta$ | $\theta$ | $\theta$ |
| :--- | :--- | :--- |
| $\theta$ | $\theta$ | $\theta$ |
| $\theta$ | $\theta$ | $\theta$ |

3. 


4.

5.

6.

7.

8. People came
9. He came in peace

