1) Each pair of letters in the ciphertext corresponds to the letter that comes in between them alphabetically. For example, 'HJ' becomes 'I', because 'I' comes after 'H' but before 'J'.

2) This code was formed by reversing the letters in each word, removing all of the spaces, and then adding a space every two letters/characters. So to solve it, start by removing all of the spaces, and try to figure out where each word ends and begins, then reverse each word.

3) This ciphertext was created by taking the plaintext, writing it in a 'V' pattern (shown below), and reading the letters left-to-right, line by line. The plaintext, in the 'V' pattern:

```
T       C       E       S       H       O       I       H       D       A       V       V
  H   S   I   H   R   A   N   T   I   T   D   W   T   T   E   N   I   G   M   V   V   V
    I       P       H       O       G       O       H       I       E       E       V
```

4) This is a simple substitution cipher using the Wingdings computer font. The alphabet in Wingdings is:

♋♌♍♎♏♐♑♒♓🙰🙵●❍■□◻❑❒⬧⧫◆❖⬥⌧⍓⌘

5) The label on the note hints that the Morse code you see may be backwards. Reverse the entire ciphertext string, and then you can translate the straightforward Morse code.

6) The text is a portion of The Gettysburg Address by Abraham Lincoln, except that many letters are missing. If you write down each missed letter as you go through the address, you will find the plaintext.

7) This is a slightly more complicated substitution cipher, as each plaintext letter does not necessarily correspond to a single ciphertext number. Each plaintext letter A to Z is assigned its corresponding number from 2 to 27, but when writing the cipher text, either the number itself or its square may be used to represent the plaintext letter. The exceptions are A(2), B(3), C(4), and D(5, or 125), due to conflicts with the other letters. This time, however, the cake is a lie.

8) This ciphertext was formed by finding the row number then column number that corresponds to each plaintext letter, determined in the chart below. So to encode the letter "R", you find that it is on row '4' and column '2'. The resulting ciphertext value is '42'. There are no spaces between ciphertext values, and dashes between each word.

	1	2	3	4	5
1	A	B	C	D	E
2	F	G	H	I/J	K
3	L	M	N	O	P
4	Q	R	S	T	U
5	B	W	X	Y	Z

9) This is a simple substitution cipher, which means that each letter in the plaintext corresponds to exactly one letter in the ciphertext.

10) Similar to Question 6, this code involves misspelled words. This one uses extra letters instead of missing letters; take the extra letters, and you find the plaintext.

11) This question requires a little imagination. The ciphertext was created generating a random phrase and a random string of numbers, both of the same number of characters as in the plaintext. In this case, they were “THISISAREDHERRING” and “31415926535897932”. Then the safe dial was rotated so that the first letter lined up with the first number; so the dial would be rotated to make ‘T’ line up with ‘3’. Then the first letter of the plaintext would be found on the ring outside of the dial, and the corresponding dial number would be written down. This process would be repeated for the second letter of each string and so on. Each letter of the ciphertext was then formatted in the form of “KN:X”, where ‘K’ is the current letter of the random phrase, ‘N’ is the current digit of the random string of numbers, and ‘X’ is the new number found on the dial. To reverse the cipher, you just follow the process in reverse; you are given the letter of the random phrase, the digit of the number string, and the number found on the dial that corresponds to the plaintext letter.

12) The ciphertext was created by rotating each letter in the plaintext by a number equal to its position in the string. The first letter (position zero) will rotate by zero, which means it does not change. The second letter will rotate by one (R -> S). The third letter rotates by two (J -> K -> L), and so on.

13) Imagine that you wrap the strip of paper around the dowel. The size of the dowel is usually the key here, but with such a short message you can guess which sets of letters will line up. In this case, every seventh pair will go together. For example pairs one, eight, fifteen, and twenty-two form “PL-EA-SE-_L”, while pairs two, nine, sixteen, and twenty-three form “EA-VE-_M-Y_”. Put these partial strings together to find the plaintext.

14) Even if you didn’t know how to read an Ultracode, you might notice some patterns in each column. Each column corresponds to a single ASCII-encoded character with the most significant bit at the bottom. For example, the first column reads “01011001” which codes for the character “C”. The second column reads “01000101” which codes for “O”, and so on.

15) At first you might flinch at the idea of decoding a QR code manually, but the QR code has little to do with this cipher. Notice in the center of the code is a large white space, separated by a horizontal line. The top half and bottom halves represent the first and last parts of the cipher, respectively. The cipher itself is an condensed alphabet system known as “Dotsies”. Dotsies use a sort of binary representation of each letter of the alphabet consisting of five vertical dots that are either “on” or “off” (black or white). The letter ‘a’ is represented by a symbol where the only the top (first) dot is black and the rest are white. The letter ‘b’ is represented by a symbol where only the second dot is black, and so on until the letter ‘f’. The full alphabet is shown below:

Using this alphabet we can determine that the top half of the code reads “CODECE” and the bottom half reads “PTION”. Putting the two halves together gives you “CODECEPTION”.