



# Internet Privacy Toolkit

---

Jessamyn West @ Kimball Library

# 0. "threat model"

---

Understanding what you have to protect yourself from is an important part of this.

CERTAIN

EXPECTED

PROBABLE

POSSIBLE

NOT EXPECTED

# **1. passwords**

---

**Why are they so complicated?**

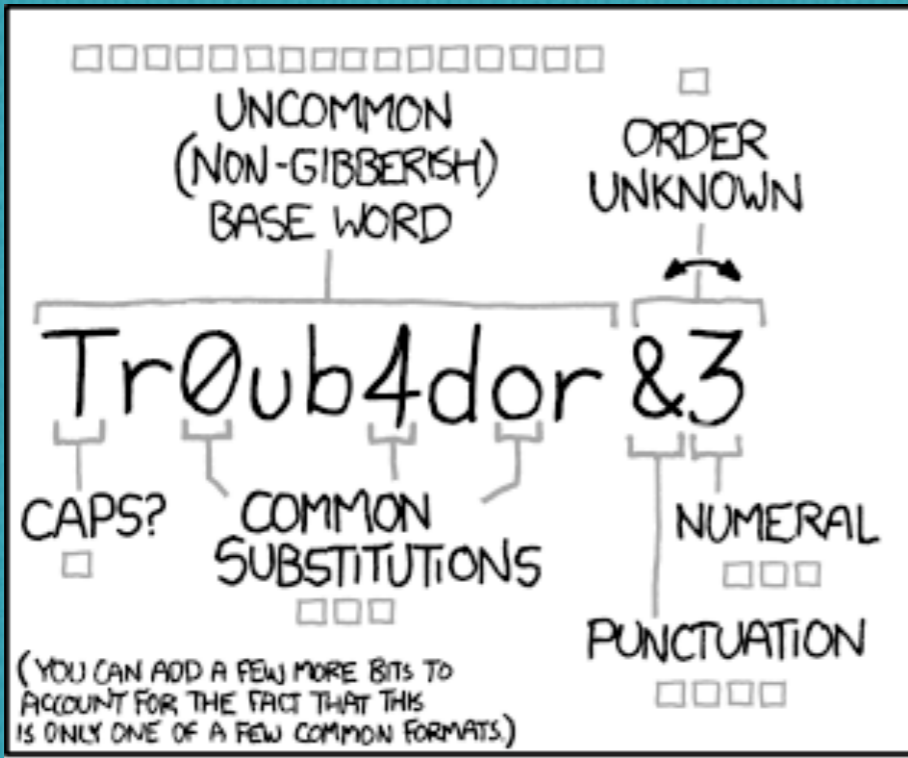
**How can we make them easier to remember?**

**Is it OK to write them down?**

**Advanced: password manager.**

**Advanced: two-factor authentication.**





~28 BITS OF ENTROPY

$2^{28} = 3 \text{ DAYS AT } 1000 \text{ GUESSES/SEC}$

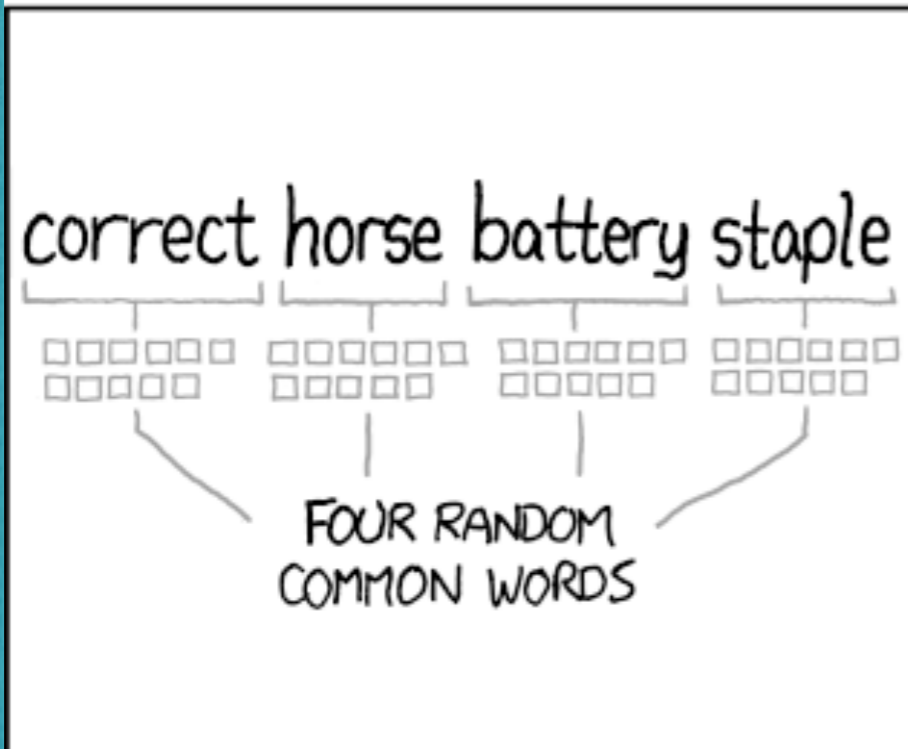
(PLAUSIBLE ATTACK ON A WEAK REMOTE WEB SERVICE. YES, CRACKING A STOLEN HASH IS FASTER, BUT IT'S NOT WHAT THE AVERAGE USER SHOULD WORRY ABOUT.)

DIFFICULTY TO GUESS: **EASY**

WAS IT TROMBONE? NO, TROUBADOR. AND ONE OF THE 0s WAS A ZERO?

AND THERE WAS SOME SYMBOL...

DIFFICULTY TO REMEMBER: **HARD**



~44 BITS OF ENTROPY

$2^{44} = 550 \text{ YEARS AT } 1000 \text{ GUESSES/SEC}$

DIFFICULTY TO GUESS: **HARD**

THAT'S A BATTERY STAPLE.

CORRECT!

DIFFICULTY TO REMEMBER: YOU'VE ALREADY MEMORIZED IT

THROUGH 20 YEARS OF EFFORT, WE'VE SUCCESSFULLY TRAINED EVERYONE TO USE PASSWORDS THAT ARE HARD FOR HUMANS TO REMEMBER, BUT EASY FOR COMPUTERS TO GUESS.

## **2. internet traffic**

---

**Private browsing.**

**Public wifi.**

**Online banking/medical stuff.**

**Look for HTTPS.**

**Advanced: VPN or TOR.**



**https://**

## **3. listening & recording devices**

---

**If it's not online, it can't spy on you.**

**Anything that listens for your voice is actively paying attention.**

**Siri, Alexa, Google, your tv...**



**“Please be aware that if your spoken words include personal or other sensitive information, that information will be among the data captured and transmitted to a third party through your use of Voice Recognition,” ”**

**–Samsung**





# 4. tracking

---

**Review your browser settings.**

**Many browser plug-ins can stop this & are simpler to use than you think.**

**Don't keep all your eggs in the Google basket.**





**HTTPS://**  
**EVERYWHERE**

## 5. trust but verify

Not so much "fake news" as "Where does this news come from?"

Don't click on mystery email links. Don't call numbers you see in pop-ups.

Know how to see where a link goes.

Advanced: tell your friends, report what's wrong.



### Sir Richard Temple, 1st Baronet

Singer

Shirley Temple Black was an American actress, singer, dancer, businesswoman and diplomat who was most notable as Hollywood's number one box-office star from 1935 to 1938. [Wikipedia](#)

**Born:** March 8, 1926, Kempsey, United Kingdom

**Died:** February 10, 2014, Hampstead, United Kingdom

**Full name:** Shirley Jane Temple

**Children:** Lori Black, Linda Susan Agar, Charles Alden Black Jr.

**Spouse:** Charles Alden Black (m. 1950–2005), John Agar (m. 1945–1950)

#### Movies

[View 45+ more](#)



The Little Princess  
1939



Bright Eyes  
1934



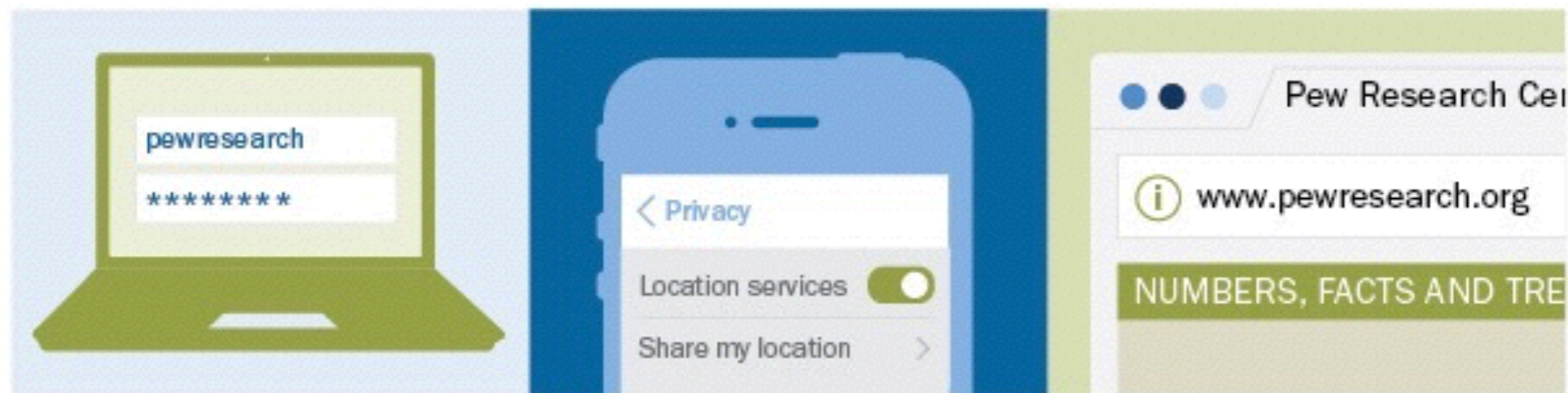
Curly Top  
1935



The Little Colonel  
1935



Heidi  
1937



## How much do you know about cybersecurity?

Test your knowledge on cybersecurity topics and terms by taking our 10-question quiz. Then see how you did in comparison with a nationally representative group of 1,055 randomly selected adult internet users surveyed online between June 17 and June 27, 2016. The survey was conducted by the GfK Group using KnowledgePanel.

When you finish, you will be able to compare your scores with the average American and see explanations for the terms and topics in each question. The analysis of the findings from the poll can be found in the full report, "[What the Public Knows About Cybersecurity.](#)"

# Get your reality checked @ your library

---

Librarians can help you or refer you to  
people who can help.

[jessamyn@gmail.com](mailto:jessamyn@gmail.com)



KIMBALL FREE PUBLIC LIBRARY—RANDOLPH.