Password Defense

CONSIDER THIS
If we assume that your password is 8 characters long, how many times would a hacker have before guessing it correctly?

If you use:
- Dictionary words
  - 500,000
- Numbers only
  - 100,000,000
- Lowercase alpha set only
  - 208,827,064,576
- Full alpha set
  - 53,459,728,531,456
- Full alpha + number set
  - 218,340,105,584,896
- Full set of allowed printable characters
  - 645,753,531,245,761

The best offense
Follow these steps to create a strong password:
- Pick a phrase you will remember
- Pick all the first or last letters from each word
- Substitute some letters with numbers and symbols
- Apply capitals to some letters (perhaps the first and last, or second to last, etc.)
- Keep or add punctuation

Some examples:

<table>
<thead>
<tr>
<th>Phrase</th>
<th>First Letters</th>
<th>Password</th>
</tr>
</thead>
<tbody>
<tr>
<td>So long and thanks for all the fish</td>
<td>slatfatf</td>
<td>5L@tf@tF</td>
</tr>
<tr>
<td>Best Series Ever: Terry Goodkind’s Sword of Truth</td>
<td>bsetgsot</td>
<td>B53:tg’Sot</td>
</tr>
<tr>
<td>You Can't Have Everything. Where Would You Put It?</td>
<td>ychewwypi</td>
<td>Uch3Wwup1?</td>
</tr>
</tbody>
</table>

Do NOT use...
When creating your password, do NOT use any of the following:
- Your name in any form
- Any ID number or user ID in any form
- Any common name (Sue, Joe, etc.)
- Passwords of fewer than six characters
- The name of a close relative, friend, or pet
- Your phone or office number, address, birthday, or anniversary
- Acronyms, geographical or product names, and technical terms
- Any all-numeral passwords, e.g. your social-security number.
- Names from popular culture
- A single word either preceded or followed by a digit, a punctuation mark, up arrow, or space.
- Words or phrases with all the vowels or white spaces deleted