

Words with 3 or more syllables	Grade Level
0-2	4
3-6	5
7-12	6
13-20	7
21-30	8
31-42	9
43-56	10
57-72	11
73-90	12
91-110	13
111-132	14
133-256	15
157-182	16
183-210	17
211-240	18

Number of sentences	Conversion Number
29	1.03
28	1.07
27	1.1
26	1.15
25	1.2
24	1.25
23	1.3
22	1.36
21	1.43
20	1.5
19	1.58
18	1.67
17	1.76
16	1.87
15	2
14	2.14
13	2.3
12	2.5
11	2.7
10	3

Table by Harold C. McGraw, Office of Educational Research, Baltimore County Public Schools, Towson, Maryland  
 Reference: Doak, C.C., Doak, L.G. & Root, J.H. (1985). *Teaching patients with low literacy skills.*

### The SMOG TEST

Use the Smog Test to ensure that your patient education materials are written at a sixth grade level.

- Select three sets of 10 sentences from the beginning, middle, and end of your material.
- Determine how many in those 30 sentences have three or more syllables.
  - DO NOT include the word Diabetes or Insulin.
  - Include repeated words.
  - Count hyphenated words as one word.
  - If a long sentence has a colon, consider each part of it a separate sentence.
  - For abbreviated words, read them out loud to determine their non-abbreviated syllable count.
- Use the Smog Test Table 1 to find the readability grade level.

### SMOG ON SHORTER PASSAGES

To determine the readability of a passage with less than 30 sentences, use this method.

- Count the total number of sentences in your material.
- Use the Conversion Table 2 to locate the conversion number in the column opposite the number of sentences in your sample.
- Count the number of words in your material that have three or more syllables. (DO NOT include the word Diabetes.)
- Multiply this word count by your conversion number. Use the resulting number as your adjusted word count to find the readability grade level in Table 1.
- If for example, your sample consists of 15 sentences and has 12 words or three or more syllables:
  - In left-hand column of Table 2, locate the number of sentences in your material: 15.
  - Opposite 15 in the adjacent column, note your conversion number: 2.0.
  - Multiply your word count(12) by 2 to equal 24.
  - Use Table 1 to find the readability level of your materials. For a word count of 24, the grade level is eight.

## SMOG READABILITY TIPS, EXAMPLES AND RESOURCES

### **Word Counting Rules:**

- A sentence is any group of words ending with a period, exclamation point, or question mark.
- Words with hyphens count-as-one-word.
- Proper nouns are counted.
- Read numbers out loud to decide the number of syllables.
- In long sentences with colons or semicolons followed by a list, count each part of the list with the beginning phrase of the sentence as an individual sentence.
- Count abbreviations as the whole word they represent.

### **Samples of Different Reading Levels:**

#### **College:**

With the onset of nausea, diarrhea, or other gastrointestinal disturbances, consult your physician immediately.

#### **12th Grade:**

If you experience nausea, diarrhea or other stomach or bowel problems, call your physician immediately.

#### **8th Grade:**

If you start having nausea, loose bowel movements, or other stomach or bowel problems, call your doctor immediately.

#### **4th Grade:**

If you start having an upset stomach, loose bowel movements, or other problems, call your doctor right away.

### **SMOG WEB RESOURCES:**

<http://uuhsc.utah.edu/pated/authors/readability.html>