**Same-different test**

Assessor:

Sample code:

You are provided with two samples, each labelled with a three-digit code.

Please assess each sample in the order provided, from left to right.

Please cleanse your palate with cracker and water between the samples.

You are NOT allowed to retaste samples.

Please indicate whether the samples are the 'same' or 'different' by ticking the

corresponding statement, and comment on any differences you experienced.

These samples may be the same or may be different.

|  |  |
| --- | --- |
| Samples are same |  |
| Samples are different |  |

Comment:----------------------------------------

**FIGURE 5.1** Example of questionnaire of same-different test.

Same- Different test

Assessor:

Sample code:

You are provided with two samples, each labelled with a three-digit code.

Please assess each sample in the order provided, from left to right.

Please cleanse your palate with cracker and water between the samples.

You are NOT allowed to retaste samples.

Please indicate how ‘same’ or ‘different’ the samples are by ticking the corresponding statement, and comment on any differences you experienced.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 |
| Different  -sure | Different  -unsure | Different – don’t know but guess | Same  – don’t know but guess | Same  -unsure | Same  -sure |

**Any comment: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**FIGURE 5.2** Example of questionnaire.

Directional Paired comparison test

Assessor Number:

You are provided with two hand creams, each labelled with a three-digit code.

Please assess each product in the order provided, from left to right.

Please indicate which of the samples below has the most cooling effect on the skin surface by circling the corresponding sample code below.

**Protocol:**

* Wipe the hand cream over the back of your right hand using 3 fingers and leave it for 15 seconds.
* Assess the overall cooling feel of the product on the skin surface.
* Once completed, repeat the same for the second sample on your left hand.

**Sample 203 / 831 has the most cooling effect on the skin surface**

**Any comment: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**FIGURE 5.3** Example of questionnaire for directional paired comparison.

Directional Paired Comparison test

Assessor No:

You are provided with two strawberry flavour drinks, each labelled with a three-digit code.

Please assess each product in the order provided, from left to right.

Please indicate which of the samples has the most strawberry flavour by circling the corresponding sample code below.

You are NOT allowed to re-taste the samples.

Please cleanse your palate with water and crackers between samples.

**Sample 375 / 194 has the most strawberry flavour**

**Any comment: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**FIGURE 5.4** Example of questionnaire of directional paired comparison test.

Multiple Paired Comparison test – Part 1

Assessor Number:

You are going to evaluate five pairs of salty crackers today.

For each pair, please taste the crackers from left to right.

Please indicate which of the samples below is the most salty by circling the corresponding sample code below.

Please drink water to cleanse your palate between samples and take a two minute break between pairs.

|  |  |  |  |
| --- | --- | --- | --- |
| **Pair No.** | **Left** | **Right** | **Comments** |
| **1st** | 758 | 538 |  |
| **2nd** | 959 | 887 |  |
| **3rd** | 572 | 285 |  |
| **4th** | 395 | 671 |  |
| **5th** | 299 | 695 |  |

**FIGURE 5.5** Example of multiple paired comparison questionnaire.

Multiple Paired Preference test

Assessor No:

You are going to evaluate six pairs of cake samples today.

For each pair, please taste the cakes from left to right.

Please indicate which of the samples below you like the most by circling the corresponding sample code below.

Please drink water to cleanse your palate between samples and take a two minute break between pairs.

|  |  |  |  |
| --- | --- | --- | --- |
| Pair No. | Left | Right | Comments |
| 1st | 183 | 429 |  |
| 2nd | 738 | 924 |  |
| 3rd | 176 | 495 |  |
| 4th | 610 | 828 |  |
| 5th | 196 | 583 |  |
| 6th | 498 | 171 |  |

**FIGURE 5.7** Example of multiple paired comparison questionnaire.

"A-not-A" test

Name: \_\_\_\_\_\_

Date: \_\_\_\_\_\_

|  |
| --- |
|  |

Sample code is:

* You are provided with a sample labelled with a 3-

digit code. This sample is either "A" or "not-A"

as experienced in preliminary sessions.

* Please taste the sample and decide whether it is "A"

or "not-A".

* Please also specify your confidence by selecting the

appropriate option.

|  |
| --- |
| It is "A"and I am sure |
| It is "A" but I am not sure |
| It is "not-A" and I am sure |
| It is "not-A" but 1 am not sure |

|  |
| --- |
|  |
|  |
|  |
|  |

* If you perceive the sample as different than "A"*,*

please briefly describe the nature of the difference:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Thank you for your participation

**FIGURE 6.1** Example of a tasting sheet for the A-not-A method.

Date:\_\_\_\_\_\_\_\_\_\_\_\_

Name:\_\_\_\_\_\_\_\_\_\_\_\_

Product Set:\_\_\_\_\_\_\_\_\_\_\_\_\_

Rinse your mouth with water before beginning.

You are presented with three coded products.

Two of these products are the same and one is different.

Please evaluate the products in the order shown on your form/on the screen, from left to right.

Select the code of the product that is different.

Rinse your mouth using water and plain crackers between products.

\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_

Please comment:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Thank you for your participation

**FIGURE 7.1** Example of questionnaire for triangle test set up for a food test.

Two out of five test

Assessor: Date:

You are provided with five samples, each labelled with a three-digit code.

Two of the samples are of one product (A) and three of another product (B).

Assess each sample in the order listed below, from left to right, and identify the two groups of samples; a group of two identical products and a group of three identical products.

Record your result below by placing a tick next to the two samples that are the same and different to the other three.

Please comment on how the two samples are different from the other three.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sample** | **458** | **791** | **634** | **205** | **986** |
| Same samples (please tick two) |  |  |  |  |  |

Comments:

**FIGURE 8.1** Example of a questionnaire for the two-out-of-five test.

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_/\_\_/\_\_

You are presented with four coded samples.

Two samples belong to one group and the other two belong to a different group.

Please assess the samples from left to right and then group them into two groups based on similarity. You may re-taste the samples.\*

Write the codes of the samples that belong to each group in the boxes below:

**\_ \_ \_**

**\_ \_ \_**

**Group 2** (please write the codes)

**Group 1** (please write the codes)

**\_ \_ \_**

**\_ \_ \_**

Please describe the difference (s) between the two groups:

**Group 2**

**Group 1**

**Thank you for taking part in this study.**

\*adjust as required

**FIGURE 9.1** Example of a questionnaire for the tetrad test.

|  |  |  |
| --- | --- | --- |
| **Duo-Trio Test** | | |
| Assessor Name: | Assessor No.: | Date: |
| You have been provided with an identified reference sample and two coded samples.  Taste the reference sample and then the two coded samples from left to right.  Circle the sample you identify to be the same as the reference.  Explain why the other sample is NOT a match and indicate the intensity of difference (very slight, slight, moderate, obvious, or very obvious).  If you cannot determine which the matched sample is, please make a guess.  You must rinse your mouth between each sample. | | |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | Reference | : | 853 |  | 394 |   Comments: | | |

[Note: This method can be modified to accommodate assessors who struggle with memory tasting. The Reference sample can be positioned in the middle of the two 3 digit – coded samples or presented twice, reducing any memory effect issues – see later.]

**FIGURE 10.1** An example of a typical scoresheet for taste.

**Difference from Control Test**

Assessor ID:\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_ Time:\_\_\_\_\_\_\_\_

Instructions:

1. You are provided with two samples, a control sample labelled ‘C’ and a test sample labelled with a three-digit code.
2. Evaluate the control sample first, cleanse your palate and then evaluate the test sample.
3. Determine if the test sample is different from the control and record the magnitude of that difference on the scale below by adding a cross to the appropriate box. If you do not perceive a difference, please add a cross to the box marked ‘No Difference’.
4. If you determine there is a difference between the control and test samples, write in the comments section, in what respect they are different.

**Sample Code \_\_\_\_\_\_\_\_\_**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **0** | **1** | **2** | **3** | **4** | **5** |
| No difference | Very slight difference | Slight difference | Moderate difference | Large difference | Very large difference |
|  |  |  |  |  |  |

**Remember that a duplicate control may be the test sample some of the time.**

Comments:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**FIGURE 11.1** Example questionnaire for the difference from control test.

**Difference from Control Test**

Assessor ID:\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_ Time:\_\_\_\_\_\_\_\_

Instructions:

1. You are provided with two samples, a control sample labelled ‘C’ and a test sample labelled with a three-digit code.
2. Evaluate the control sample first and then cleanse your palate.
3. Take a 10 minute break
4. Then evaluate the test sample.
5. Determine if the test sample is different from the control and record the magnitude of that difference on the scale below by adding a cross to the appropriate box. If you do not perceive a difference, please add a cross to the box marked ‘No Difference’.
6. If you determine there is a difference between the control and test samples, write in the comments section, in what respect they are different.

**Test Sample Code 856** .

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **0** | **1** | **2** | **3** | **4** | **5** |
| No difference | Very slight difference | Slight difference | Moderate difference | Large difference | Very large difference |
|  |  |  |  |  |  |

**Remember that a duplicate control may be the test sample some of the time.**

Comments:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­­­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**FIGURE 11.6** Questionnaire used for the case study 1 difference from control test.

**Difference from Control Test**

Assessor ID:\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_ Time:\_\_\_\_\_\_\_\_

Instructions:

1. You are provided with two samples, a control sample labelled ‘C’ and a test sample labelled with a three-digit code.
2. Evaluate the odour of the control sample first by sniffing the headspace from the jar.
3. Then evaluate the odour intensity of the test sample.
4. Determine if the odour of the test sample is different from the control and record the magnitude of that difference on the scale below by adding a cross to the appropriate box. If you do not perceive a difference, please add a cross to the box marked ‘No Difference’.
5. Please note down any further information regarding how the two samples differ if you find a difference.

**Test Sample Code 561** .

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **-3** | **-2** | **-1** | **0** | **+1** | **+2** | **+3** |
| Much weaker | Moderately weaker | Slightly weaker | No difference | Slightly stronger | Moderately stronger | Much stronger |
|  |  |  |  |  |  |  |

**Remember that a duplicate control may be the test sample some of the time.**

Comments:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**FIGURE 11.8** Questionnaire used for the case study 2 difference from control test.

**Ranking Test**

Assessor ID:\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_ Time:\_\_\_\_\_\_\_\_

Attribute:\_\_\_Bitterness\_\_\_\_\_\_

Instructions:

1. You are provided with four samples, each labelled with a three-digit code.
2. Evaluate the samples in the order presented from left to right, cleansing your palate between samples before evaluating the next sample.

|  |  |  |  |
| --- | --- | --- | --- |
| **648** | **561** | **140** | **937** |

1. Rank the samples in order of increasing bitterness. You may re-assess any of the samples again as often as you wish until you have made your mind up.
2. Then please write down the codes of the samples in the order from least to most bitter in the table below.
3. If two samples appear the same, make a best guess as to their rank order and note down in the comments section that it was a forced choice.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Rank Order** | | | |
| **1** | **2** | **3** | **4** |
| Least Bitter |  |  | Most Bitter |
| **Sample Code** |  |  |  |  |

Comments:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**FIGURE 12.2** Example questionnaire for the ranking test.

**Ranking Test**

Assessor ID:\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_ Time:\_\_\_\_\_\_\_\_

Attribute:\_\_Smoke\_Odour Intensity\_\_\_\_\_\_

**Instructions:**

1. You are provided with four samples, each labelled with a three-digit code.
2. Evaluate the samples in the order presented from left to right.

|  |  |  |  |
| --- | --- | --- | --- |
| **561** | **140** | **937** | **648** |

1. Rank the samples in order of increasing smoke odour intensity. You may re-assess any of the samples again as often as you wish until you have made your mind up.
2. Then please write down the codes of the samples in the order from lowest to highest smoke odour intensity in the table below.
3. If two or more samples seem to be the same, make a best guess as to their rank order and note down in the comments section that it was a forced choice.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Rank Order** | | | |
| **1** | **2** | **3** | **4** |
| **Lowest Smoke Odour Intensity** |  |  | **Highest Smoke Odour Intensity** |
| **Sample Code** |  |  |  |  |

Comments:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**FIGURE 12.3** Questionnaire used for the case study 1 ranking test.

**Ranking Test**

Assessor ID:\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_ Time:\_\_\_\_\_\_\_\_

**Instructions:**

1. You are provided with four samples, each labelled with a three-digit code.
2. Evaluate the samples in the order presented from left to right, cleansing your palate between samples before evaluating the next sample.

|  |  |  |  |
| --- | --- | --- | --- |
| **825** | **151** | **230** | **593** |

1. Rank the samples in order of preference. You may re-assess any of the samples again as often as you wish until you have made your mind up.
2. Then please write down the codes of the samples in the order from least to most preferred in the table below.
3. If two or more samples are preferred equally, make a best guess to the one you most prefer and note down in the comments section which you liked equally.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Rank Order** | | | |
| **1** | **2** | **3** | **4** |
| **Least Preferred** |  |  | **Most Preferred** |
| **Sample Code** |  |  |  |  |

Comments:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Thank you for your participation.

**FIGURE 12.5** Questionnaire used for the case study 2 ranking test.

**FIGURE 13.1** Example of ballot for an ABX discrimination task on a food product.

**ABX Discrimination Task**

**Assessor ID: Date:**

Please taste the samples in the order presented on the tray, from left to right.

In between tasting each product please cleanse your palate with the cracker and water provided.

Once you have tasted both products coded as shown below, we will bring you a third sample. Your task is to identify if this product more closely resembles the first product you tasted or the second product you tasted.

Please indicate your response by circling your answer below:

**301 726**

Please write comments on any differences you experienced:

**Dual-standard test sheet example (Assessor)**

Name …………………………………………….

Date ……………………………………

**Part 1**

* Please assess the two standards in the order provided.
* A combination of AA, BB is **impossible**.
* Try to determine the attributes that enable you to tell the samples apart.
* Please take your time.
* You may use the area below for notes if you wish.

Standard A is

Standard B is

* Please take a break for 30 seconds – a timer is provided.
* During this time please follow the instructions given for palate cleansing.
* Please indicate, in the usual manner, when your 30 seconds are up.
* You will then be provided with two coded samples.

**Part 2**

* Please assess the two coded samples in the order shown below.
* These two samples are the same as the standards but are not identified as such.
* Your job is to decide which of the coded samples is the same as standard A and which of the coded samples is the same as standard B.
* Please take your time.
* You may reassess the standards if you wish.
* Write the letter of the standard (A or B) alongside the code of the matching sample in the table below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Code | Sample | Standard | Sample | Standard |
| VV390 | 715 |  | 823 |  |

**FIGURE 14.2** Dual-standard test evaluation sheet.