Case Worksheet for Learners

Case Goal

Early identification of autism spectrum disorder (ASD) and referral for subsequent specialized developmental services greatly improves long-term outcomes for children with ASD. The American Academy of Pediatrics (AAP) recommends ongoing developmental surveillance at every visit, developmental screenings at 9, 18, and 24 or 30 months, and autism-specific screening at 18 and 24 months.

Key Learning Points of This Case

1. *Perform ASD-specific screening as recommended by the AAP.*
   a. Review the AAP guidelines on screening for ASD. _____
   _____
   _____

   b. Discuss the importance of screening for ASD as part of developmental surveillance. _____
   _____
   _____

   c. Choose an appropriate screening tool. _____
   _____
   _____

   d. Administer and score a screening tool correctly _____
   _____
   _____

2. *Develop an appropriate management plan based on results of screening for ASD.*
   a. Interpret screening results correctly. _____
   _____
   _____

   b. Explain the results of screening to parents. _____
   _____
   _____

   c. Formulate an appropriate plan of care based on screening results. _____
   _____
   _____

Post Learning Exercise

1. Ask the caregivers of children at the 18-, 24-, and 30-month visits to complete the M-CHAT (the M-CHAT is available at https://www.firstsigns.org/screening/tools/rec.htm).
2. Practice explaining the process of screening to families and describe the limitations of screening tools.
3. Score the M-CHAT screening tools completed by caregivers.
4. Discuss the results with families of your patients.
5. Discuss with your preceptor where you would refer a child with a positive screen in your area (for example: audiology, Early Intervention, a developmental pediatrician).
6. Perform the M-CHAT follow up interview with a family.

Case Study Part I

It's a busy morning in the NICU, and you, a second-year pediatric resident, think longingly of the lunch you won't be able to have as you quickly sign out your patients. You hurry over to your community clinic, arriving a few minutes late. Your first patient for the afternoon is a baby you have been following since birth. You first met the family in the newborn nursery and have enjoyed seeing little Matthew learn to roll over, sit, cruise, and walk.

Matthew is now 18 months old and is coming in for a routine health care maintenance visit. As you enter the room, you smile at Matthew and ask his mother and father how he's doing. "Great," they reply. "He loves to explore our apartment and laughs like crazy when we play peek-a-boo. We have started taking him to the park, and he enjoys playing with blocks." You do a physical exam on Matthew and note that he has said very few words during the assessment. His eye contact is variable. When you ask about his language, Matthew's parents indicate that, although they have noticed he's not saying as many words as they would have anticipated at his age, they attribute this to his being raised in a bilingual household. They indicate he only has a couple of words. You spend a few more moments engaging Matthew in play before going back to the conference room to present to the attending.

Although Matthew is a quiet and sweet boy, you remain concerned about his language and variable eye contact. Given his age, Matthew should have an ASD-specific screening as well as a general developmental screening as part of his 18-month checkup. After discussing Matthew's case with your preceptor, you go back to the family. You discuss the importance of screening with Matthew's parents. You explain to Matthew's parents that screeners are not used to diagnose, but can provide important information regarding milestones that Matthew should be reaching. You give Matthew's parents the screening tool to complete.

Your next patient is Claudia, a 2-year-old girl who has just moved to the area from another state. This is Claudia's first visit to the clinic. As you introduce yourself to Claudia, you notice that she stares at the door. You complete a physical exam and look over Claudia's immunization record. You ask Claudia's dad about preschool, and he replies that since Claudia does not speak yet, the family decided not to place her in preschool. You attempt to engage Claudia with toys, but Claudia appears more interested in the buttons on her sweater. You go back to your preceptor and describe Claudia's concerning behavior and lack of words. You and your preceptor agree that these may be signs of ASD. After explaining the routine of screening for ASD at the 18-month and 2-year-old visits, you give the screening tool to Claudia's dad for completion.

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Case Study Part II

Matthew's parents complete the questionnaire and give it back to the nurse. The nurse scores the M-CHAT and determines that he has three failed items. You discuss Matthew with your preceptor, and together you decide to refer to an audiologist and call Matthew's parents for a follow-up interview.

Claudia's dad is unsure of the answers to several questions as mom typically cares for Claudia during the day. He asks to speak with you. Upon scoring the M-CHAT, you note that Claudia failed at least four critical items on the screening tool, as well as at least six other items. You explain to Claudia's dad that some of his responses about Claudia's behavior raised concerns about Claudia's development.

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Case Study Part III - Epilogue

Matthew's parents return the next week for a follow-up appointment to discuss the results of the screening tool, and you conduct the follow-up interview. On the follow-up interview, Matthew passes all the items. You discuss Matthew's development with his parents and ask them if they have any concerns. They state that they do not at this time. You provide ideas for engaging Matthew in creative play, as well as facilitating speech and language development, and you make another health care-maintenance appointment for Matthew during which you will continue to follow his development progress. Per the AAP recommendations, Matthew should have another ASD-specific screen at 24 months or earlier if the parents or physician have concerns.

Claudia and her parents also return the next week so you can obtain further history and complete the M-CHAT follow-up interview with her mom and dad. You were concerned by Claudia's results on the M-CHAT screener, and you would like to use the follow-up interview to identify the areas of greatest need and where to focus your energies. Claudia's parents' responses note continued concerns regarding Claudia's communication and social skills. For instance, Claudia takes interest in children, but typically does not respond to the presence of others. She does not engage in pretend play and does not play properly with toys, preferring to bang them on the floor. Although she uses her finger to point, she cries and whines when she wants something and does not use gestures or pointing in order to work to gain attention from others. Claudia also does not imitate others. She occasionally responds to her name, but does not respond when she is focused on a preferred activity. She also has been noted to stare at nothing and wander. Given the presence of continued concerns, you speak in depth with Claudia's parents regarding the possible diagnosis of autism spectrum disorder based on the screening measures. Of note, although some of Claudia's initially reported behaviors of concern are resolved on the M-CHAT follow-up interview, and Claudia's dad is unsure of some of Claudia's behaviors, there remain enough concerning behaviors to warrant referral for further evaluation. You address the need for a formal evaluation to clearly delineate Claudia's symptoms. Claudia's parents are in agreement with the concerns, but also wonder how these results are accurate based on such a short time for observation. You refer Claudia for a hearing evaluation and an assessment by an early intervention specialist. You also refer her for a complete evaluation by a developmental specialist.

You schedule a follow-up visit with Claudia and her parents in two months to continue to follow her progress and to ensure that assessments and services are underway.

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Handout I: AAP Screening Guidelines

Surveillance and Screening Algorithm: Autism Spectrum Disorders (ASDs)

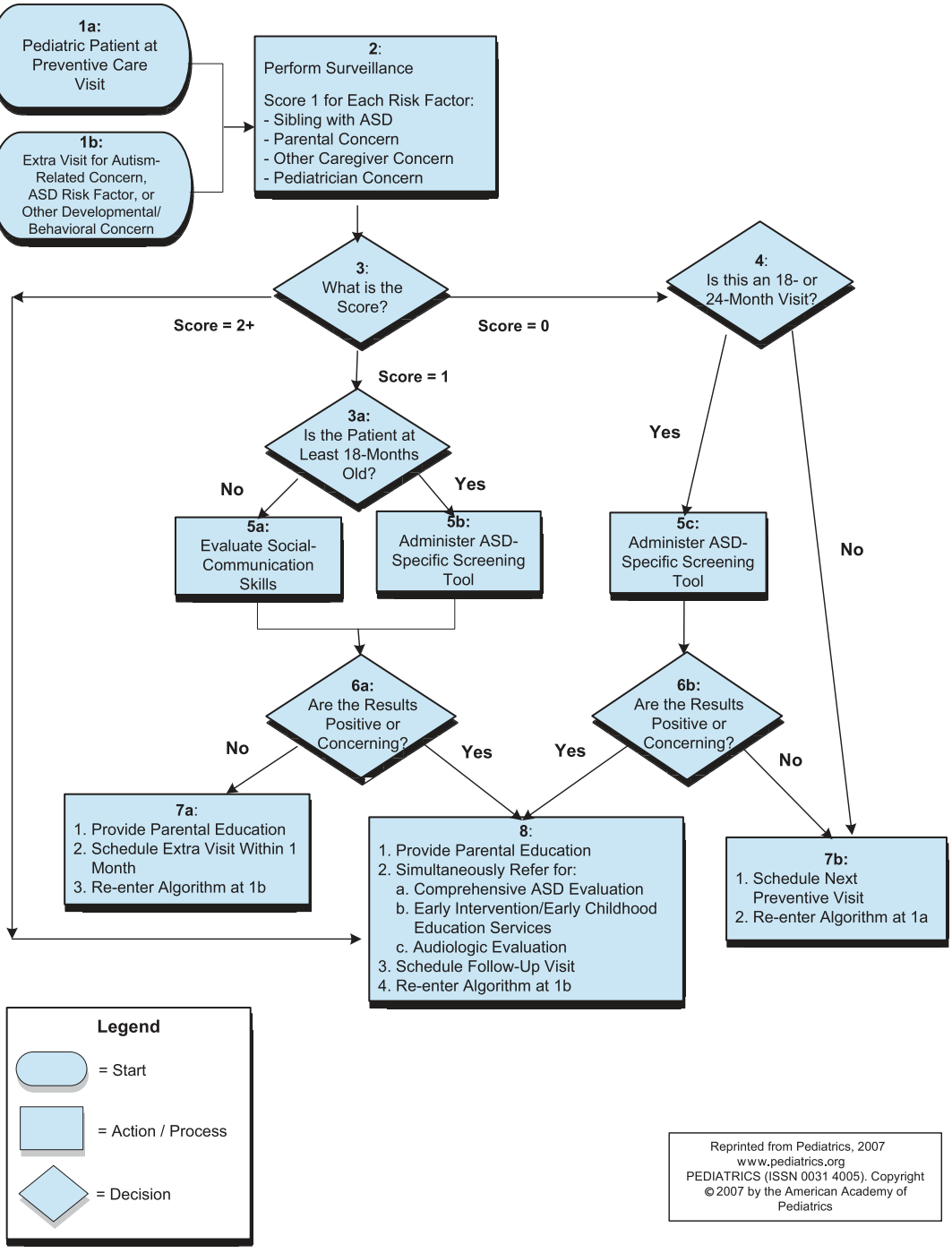

FIGURE 1
Surveillance and screening algorithm: ASDs.

Surveillance and Screening Algorithm: Autism Spectrum Disorders (ASDs)

1a: Pediatric Patient at Preventive Care Visit

1a - Developmental concerns, including those about social skill deficits, should be included as one of several health topics addressed at each pediatric preventive care visit through the first 5 years of life. *(Go to step 2)*

1b: Extra Visit for Autism-Related Concern, ASD Risk Factor, or Other Developmental/ Behavioral Concern

1b – At the parents' request, or when a concern is identified in a previous visit, a child may be scheduled for a "problem-targeted" clinic visit because of concerns about ASD. Parent concerns may be based on observed behaviors, social or language deficits, issues raised by other caregivers, or heightened anxiety produced by ASD coverage in the media. *(Go to step 2)*

2:
Perform Surveillance

Score 1 for Each Risk Factor:
- Sibling with ASD
- Parental Concern
- Other Caregiver Concern
- Pediatrician Concern

2 - Developmental surveillance is a flexible, longitudinal, continuous, and cumulative process whereby health care professionals identify children who may have developmental problems. There are 5 components of developmental surveillance: eliciting and attending to the parents' concerns about their child's development, documenting and maintaining a developmental history, making accurate observations of the child, identifying the risk and protective factors, and maintaining an accurate record and documenting the process and findings. The concerns of parents, other caregivers, and pediatricians all should be included in determining whether surveillance suggests that the child may be at risk of an ASD. In addition, younger siblings of children with an ASD should also be considered at risk, because they are 10 times more likely to develop symptoms of an ASD than children without a sibling with an ASD. Scoring risk factors will help determine the next steps. *(Go to step 3)*

For more information on developmental surveillance, see "Identifying Infants and Young Children With Developmental Disorders in the Medical Home: An Algorithm for Developmental Surveillance and Screening" (*Pediatrics* 2006;118:405-420).

3: What is the Score?

3 - Scoring risk factors:
- If the child does not have a sibling with an ASD and there are no concerns from the parents, other caregivers, or pediatrician: Score=0 *(Go to step 4)*
- If the child has only 1 risk factor, either a sibling with ASD or the concern of a parent, caregiver, or pediatrician: Score=1 *(Go to step 3a)*
- If the child has 2 or more risk factors: Score=2+ *(Go to step 8)*

3a: Is the Patient at Least 18-Months Old?

3a –
- If the child's age is <18 months, *Go to step 5a*
- If the child's age is ≥18 months, *Go to step 5b*

4: Is this an 18- or 24-Month Visit?

4 – In the absence of established risk factors and parental/provider concerns (score=0), a level-1 ASD-specific tool should be administered at the 18- and 24-month visits. *(Go to step 5c)* If this is not an 18- or 24-month visit, *(Go to step 7b).*

Note: In the AAP policy, "Identifying Infants and Young Children With Developmental Disorders in the Medical Home: An Algorithm for Developmental Surveillance and Screening", a general developmental screen is recommended at the 9-, 18-, and 24-or 30-month visits and an ASD screening is recommended at the 18-month visit. This clinical report also recommends an ASD screening at the 24-month visit to identify children who may regress after 18 months of age.

5a: Evaluate Social-Communication Skills

5a - If the child's age is <18 months, the pediatrician should use a tool that specifically addresses the clinical characteristics of ASDs, such as those that target social-communication skills. *(Go to step 6a)*

5b: Administer ASD-Specific Screening Tool

5b - If the child's age is ≥18 months, the pediatrician should use an ASD-specific screening tool. *(Go to step 6a)*

5c: Administer ASD-Specific Screening Tool

5c – For all children ages 18 or 24 months (regardless of risk factors), the pediatrician should use an ASD-specific screening tool. *(Go to step 6b)*

AAP-recommended strategies for using ASD screening tools: *"Autism: Caring for Children with Autism Spectrum Disorders: A Resource Toolkit for Clinicians" (in press)**

6a: Are the Results Positive or Concerning?

6a – When the result of the screening is *negative*, *Go to step 7a*

When the result of the screening is *positive*, *Go to step 8*

6b: Are the Results Positive or Concerning?

6b – When the result of the ASD screening (at 18- and 24-month visits) is *negative*, *Go to step 7b*

When the result of the ASD screening (at 18- and 24-month visits) is *positive*, *Go to step 8*

7a:
1. Provide Parental Education
2. Schedule Extra Visit Within 1 Month
3. Re-enter Algorithm at 1b

7a – If the child demonstrates risk but has a negative screening result, information about ASDs should be provided to parents. The pediatrician should schedule an extra visit within 1 month to address any residual ASD concerns or additional developmental/ behavioral concerns after a negative screening result. The child will then re-enter the algorithm at 1b. A "wait-and-see" approach is discouraged. If the only risk factor is a sibling with an ASD, the pediatrician should maintain a higher index of suspicion and address ASD symptoms at each preventive care visit, but an early follow-up within 1 month is not necessary unless a parental concern subsequently arises.

7b:
1. Schedule Next Preventive Visit
2. Re-enter Algorithm at 1a

7b – If this is not an 18- or 24-month visit, or when the result of the ASD screening is *negative*, the pediatrician can inform the parents and schedule the next routine preventive visit. The child will then re-enter the algorithm at 1a.

8:
1. Provide Parental Education
2. Simultaneously Refer for:
   a. Comprehensive ASD Evaluation
   b. Early Intervention/Early Childhood Education Services
   c. Audiologic Evaluation
3. Schedule Follow-up Visit
4. Re-enter Algorithm at 1b

8 – If the screening result is *positive* for possible ASD in step 6a or 6b, the pediatrician should provide peer reviewed and/or consensus-developed ASD materials. Because a positive screening result does not determine a diagnosis of ASD, the child should be referred for a comprehensive ASD evaluation, to early intervention/early childhood education services (depending on child's age), and an audiologic evaluation. A categorical diagnosis is not needed to access intervention services. These programs often provide evaluations and other services even before a medical evaluation is complete. A referral to intervention services or school also is indicated when other developmental/behavioral concerns exist, even though the ASD screening result is negative. The child should be scheduled for a follow-up visit and will then re-enter the algorithm at 1b. All communication between the referral sources and the pediatrician should be coordinated.

AAP information for parents about ASDs includes: "*Is Your One-Year-Old Communicating with You?*" and *"Understanding Autism Spectrum Disorders.*"

*Available at www.aap.org

FIGURE 1
Continued

Handout II: Screening Tools Chart

Screener	Ages	Format	Items	Time to Complete	Available Languages	Information and Free Downloadable Templates	Scoring Templates and Instructions
Checklist for Autism in Toddlers (CHAT)	18–24 mo+	Interview or questionnaire + observations	Section A: 9 yes/no parent questions Section B: 5 clinician observations	5 min	English, Dutch, Greek, Persian, Spanish, Swedish	http://autismresearchcentre.com/arc_tests	www.ny2aap.org/CHATscoring.pdf
Childhood Autism Spectrum Test (CAST)	4–11 yr	Parent-completed questionnaire	37 items	10 min	English, Dutch, French, Greek, Persian, Slovak, Slovenian, Spanish, Swedish	http://autismresearchcentre.com/arc_tests	www.autismresearchcentre.com/tests/cast_test.asp
Modified Checklist for Autism in Toddlers (M-CHAT)	16–30 mo	Parent-completed questionnaire	23 items	5–10 min	Arabic, Bangla, Chinese, Dutch, French, German, Greek, Gujarti, Icelandic, Japanese, Kannada, Kurdish, Portuguese, Sinhala, Somalian, Spanish, Tamil, Turkish, Vietnamese, Urdu	http://autismresearchcentre.com/arc_tests https://www.firstsigns.org/screening/tools/rec.htm	www.firstsigns.org/downloads/Downloads_archive/m-chat_scoring.PDF
Pervasive Developmental Disorders Screening Test-II, Primary Care Screener (PDDST-II, PCS)	18–48 mo	Parent-completed questionnaire	22 items	10–15 min	English, Spanish	Available for purchase at: http://www.pearsonassessments.com/haiweb/cultures/en-us/productdetail.htm?pid=076-1635-106&Community=CA_Ed_AI_Early	
Communication and Symbolic Behavior Scales Developmental Profile (CSBS DP) Infant-Toddler Checklist	9–24 mo	Broadband screener used to detect communication delays including in children with ASD	24 items	5–10 min	English, Chinese, German, Slovenian, Spanish	http://firstwords.fsu.edu/pdf/checklist.pdf	http://firstwords.fsu.edu/pdf/Checklist_Scoring_Cutoffs.pdf
Screening Tool for Autism in 2-Year Olds (STAT)	24–36 mo	Screener is administered by trained examiners	12 activities that look at play, imitation, communication	20 min	not applicable	http://kc.vanderbilt.edu/triad/training/page.aspx?id=821	

Screening Tools Chart References

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Robins DL. M-CHAT Information. http://www2.gsu.edu/~psydlr/Diana_L._Robins,_Ph.D..html

PDDST-II
Pervasive Developmental Disorders Screening Test-II (PDDST-II). American Speech-Language-Hearing Association website. http://www.asha.org/SLP/assessment/Pervasive-Developmental-Disorders-Screening-Test-II-(PDDST-II).htm.

Suggested Citation: Scharf RJ. Sia JH, Pappas D. Rosenberg M. Screening Tools Chart. Developed for the Autism Case Training A Development-Behavioral Pediatrics Curriculum. 2011.

Handout III: Blank M-CHAT Form

Instructions and Permissions for Use of the M-CHAT

The Modified Checklist for Autism in Toddlers (M-CHAT; Robins, Fein, & Barton, 1999) is available for free download for clinical, research, and educational purposes. There are two authorized websites: the M-CHAT and supplemental materials can be downloaded from **www.firstsigns.org** or from Dr. Robins' website, at **http://www2.gsu.edu/~wwwpsy/faculty/robins.htm**

Users should be aware that the M-CHAT continues to be studied, and may be revised in the future. Any revisions will be posted to the two websites noted above.

Furthermore, the M-CHAT is a copyrighted instrument, and use of the M-CHAT must follow these guidelines:

(1) Reprints/reproductions of the M-CHAT must include the copyright at the bottom (© 1999 Robins, Fein, & Barton). No modifications can be made to items or instructions without permission from the authors.

(2) The M-CHAT must be used in its entirety. There is no evidence that using a subset of items will be valid.

(3) Parties interested in reproducing the M-CHAT in print (e.g., a book or journal article) or electronically (e.g., as part of digital medical records or software packages) must contact Diana Robins to request permission (drobins@gsu.edu).

Instructions for Use

The M-CHAT is validated for screening toddlers between 16 and 30 months of age, to assess risk for autism spectrum disorders (ASD). The M-CHAT can be administered and scored as part of a well-child check-up, and also can be used by specialists or other professionals to assess risk for ASD. The primary goal of the M-CHAT was to maximize sensitivity, meaning to detect as many cases of ASD as possible. Therefore, there is a high false positive rate, meaning that not all children who score at risk for ASD will be diagnosed with ASD. To address this, we have developed a structured follow-up interview for use in conjunction with the M-CHAT; it is available at the two websites listed above. Users should be aware that even with the follow-up questions, a significant number of the children who fail the M-CHAT will not be diagnosed with an ASD; however, these children are at risk for other developmental disorders or delays, and therefore, evaluation is warranted for any child who fails the screening.

The M-CHAT can be scored in less than two minutes. Scoring instructions can be downloaded from **http://www2.gsu.edu/~wwwpsy/faculty/robins.htm or www.firstsigns.org**. We also have developed a scoring template, which is available on these websites; when printed on an overhead transparency and laid over the completed M-CHAT, it facilitates scoring. Please note that minor differences in printers may cause your scoring template not to line up exactly with the printed M-CHAT.

Children who fail more than 3 items total or 2 critical items (particularly if these scores remain elevated after the follow-up interview) should be referred for diagnostic evaluation by a specialist trained to evaluate ASD in very young children. In addition, children for whom there are physician, parent, or other professional's concerns about ASD should be referred for evaluation, given that it is unlikely for any screening instrument to have 100% sensitivity.

M-CHAT

Please fill out the following about how your child usually is. Please try to answer every question. If the behavior is rare (e.g., you've seen it once or twice), please answer as if the child does not do it.

1.	Does your child enjoy being swung, bounced on your knee, etc.?	Yes No
2.	Does your child take an interest in other children?	Yes No
3.	Does your child like climbing on things, such as up stairs?	Yes No
4.	Does your child enjoy playing peek-a-boo/hide-and-seek?	Yes No
5.	Does your child ever pretend, for example, to talk on the phone or take care of a doll or pretend other things?	Yes No
6.	Does your child ever use his/her index finger to point, to ask for something?	Yes No
7.	Does your child ever use his/her index finger to point, to indicate interest in something?	Yes No
8.	Can your child play properly with small toys (e.g. cars or blocks) without just mouthing, fiddling, or dropping them?	Yes No
9.	Does your child ever bring objects over to you (parent) to show you something?	Yes No
10.	Does your child look you in the eye for more than a second or two?	Yes No
11.	Does your child ever seem oversensitive to noise? (e.g., plugging ears)	Yes No
12.	Does your child smile in response to your face or your smile?	Yes No
13.	Does your child imitate you? (e.g., you make a face-will your child imitate it?)	Yes No
14.	Does your child respond to his/her name when you call?	Yes No
15.	If you point at a toy across the room, does your child look at it?	Yes No
16.	Does your child walk?	Yes No
17.	Does your child look at things you are looking at?	Yes No
18.	Does your child make unusual finger movements near his/her face?	Yes No
19.	Does your child try to attract your attention to his/her own activity?	Yes No
20.	Have you ever wondered if your child is deaf?	Yes No
21.	Does your child understand what people say?	Yes No
22.	Does your child sometimes stare at nothing or wander with no purpose?	Yes No
23.	Does your child look at your face to check your reaction when faced with something unfamiliar?	Yes No

Handout IV: M-CHAT for Matthew

:30

MATTHEW

M-CHAT

Please fill out the following about how your child usually is. Please try to answer every question. If the behavior is rare (e.g., you've seen it once or twice), please answer as if the child does not do it.

1.	Does your child enjoy being swung, bounced on your knee, etc.?	Yes No
2.	Does your child take an interest in other children?	Yes No
3.	Does your child like climbing on things, such as up stairs?	Yes No
4.	Does your child enjoy playing peek-a-boo/hide-and-seek?	Yes No
5.	Does your child ever pretend, for example, to talk on the phone or take care of a doll or pretend other things?	Yes No
6.	Does your child ever use his/her index finger to point, to ask for something?	Yes No
7.	Does your child ever use his/her index finger to point, to indicate interest in something?	Yes No
8.	Can your child play properly with small toys (e.g. cars or blocks) without just mouthing, fiddling, or dropping them?	Yes No
9.	Does your child ever bring objects over to you (parent) to show you something?	Yes No
10.	Does your child look you in the eye for more than a second or two?	Yes No
11.	Does your child ever seem oversensitive to noise? (e.g., plugging ears)	Yes No
12.	Does your child smile in response to your face or your smile?	Yes No
13.	Does your child imitate you? (e.g., you make a face-will your child imitate it?)	Yes No
14.	Does your child respond to his/her name when you call?	Yes No
15.	If you point at a toy across the room, does your child look at it?	Yes No
16.	Does your child walk?	Yes No
17.	Does your child look at things you are looking at?	Yes No
18.	Does your child make unusual finger movements near his/her face?	Yes No
19.	Does your child try to attract your attention to his/her own activity?	Yes No
20.	Have you ever wondered if your child is deaf?	Yes No
21.	Does your child understand what people say?	Yes No
22.	Does your child sometimes stare at nothing or wander with no purpose?	Yes No
23.	Does your child look at your face to check your reaction when faced with something unfamiliar?	Yes No

Handout V: M-CHAT Form for Claudia

:30

Claudia

M-CHAT

Please fill out the following about how your child usually is. Please try to answer every question. If the behavior is rare (e.g., you've seen it once or twice), please answer as if the child does not do it.

1.	Does your child enjoy being swung, bounced on your knee, etc.?	Yes No
2.	Does your child take an interest in other children?	Yes No
3.	Does your child like climbing on things, such as up stairs?	Yes No
4.	Does your child enjoy playing peek-a-boo/hide-and-seek?	Yes No
5.	Does your child ever pretend, for example, to talk on the phone or take care of a doll or pretend other things?	Yes No
6.	Does your child ever use his/her index finger to point, to ask for something?	Yes No
7.	Does your child ever use his/her index finger to point, to indicate interest in something?	Yes No
8.	Can your child play properly with small toys (e.g. cars or blocks) without just mouthing, fiddling, or dropping them?	Yes No
9.	Does your child ever bring objects over to you (parent) to show you something?	Yes No
10.	Does your child look you in the eye for more than a second or two?	Yes No
11.	Does your child ever seem oversensitive to noise? (e.g., plugging ears)	Yes No
12.	Does your child smile in response to your face or your smile?	Yes No
13.	Does your child imitate you? (e.g., you make a face-will your child imitate it?)	Yes No
14.	Does your child respond to his/her name when you call?	Yes No
15.	If you point at a toy across the room, does your child look at it?	Yes No
16.	Does your child walk?	Yes No
17.	Does your child look at things you are looking at?	Yes No
18.	Does your child make unusual finger movements near his/her face?	Yes No
19.	Does your child try to attract your attention to his/her own activity?	Yes No
20.	Have you ever wondered if your child is deaf?	? Yes No
21.	Does your child understand what people say?	Yes No
22.	Does your child sometimes stare at nothing or wander with no purpose?	Yes No
23.	Does your child look at your face to check your reaction when faced with something unfamiliar?	? Yes No

Handout VI: M-CHAT Scoring Instructions

Modified Checklist for Autism in Toddlers (M-CHAT) Coder

1.		Yes
2.		***Yes***
3.		Yes
4.		Yes
5.		Yes
6.		Yes
7.		***Yes***
8.		Yes
9.		***Yes***
10.		Yes
11.		No
12.		Yes
13.		***Yes***
14.		***Yes***
15.		***Yes***
16.		Yes
17.		Yes
18.		No
19.		Yes
20.		No
21.		Yes
22.		No
23.		Yes

Instructions:
Center this coding tool between the numbers & answers on the English or Spanish M-CHAT.
Keep the shaded areas lined up.

Normal answers are marked at right. The ones that represent critical answers are bolded and italicized.

If a patient's answer does not match the normal answer, place a check (√) next to the non-matching answer.
Place 2 checks (√√) if it is a critical item.

If:
- any 2 critical items don't match
  or
- any 3 items overall don't match

Then:
- this screen requires followup
- followup should consist of the confirmatory interview and referrals as necessary.

Else if:
- <2 critical items don't match
  and
- <3 items overall don't match

Then:
- screen is PASSED.

Handout VII: M-CHAT Follow-Up Interview

Instructions for the M-CHAT Follow-Up Interview™

Select items based on M-CHAT scores. Administer only those items for which the parent indicated behavior that demonstrates risk for autism spectrum disorders (ASDs), and/or those which the healthcare provider has concerns may not have been answered accurately.

Score interview items in the same manner as the M-CHAT. If an item is failed, it indicates risk for ASDs. Failure of two critical items (items 2, 7, 9, 13, 14, 15) or any three total warrants referral to a specialist. Please note that failing the follow-up interview does not diagnose ASDs; it indicates increased risk for ASDs.

Please note that if the healthcare provider has concerns about ASDs, children should be referred to a specialist regardless of the score on the M-CHAT or M-CHAT follow-up interview.

Please use the following M-CHAT page to record the scores after the interview is completed.

M-CHAT™

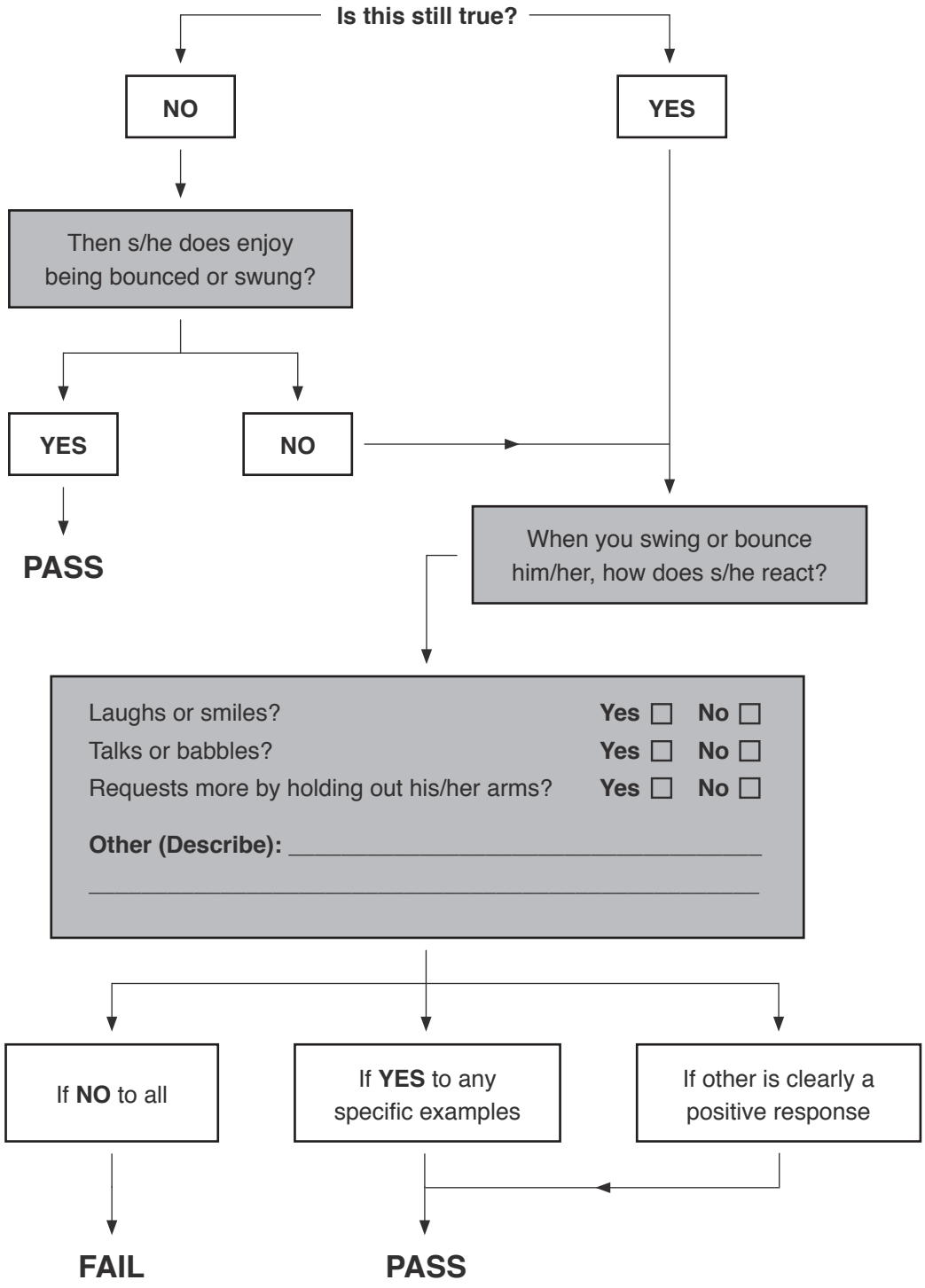
Please score the interview items on this page. Critical items are marked in **BOLD** and reverse score items, meaning those for which a score of "Yes" indicates risk for autism (11, 18, 20, 22) are noted by the word **REVERSE**.

1.	Does your child enjoy being swung, bounced on your knee, etc.?	Yes	No
2.	**Does your child take an interest in other children?**	**Yes**	**No**
3.	Does your child like climbing on things, such as up stairs?	Yes	No
4.	Does your child enjoy playing peek-a-boo/hide-and-seek?	Yes	No
5.	Does your child ever pretend, for example, to talk on the phone or take care of a doll or pretend other things?	Yes	No
6.	Does your child ever use his/her index finger to point, to ask for something?	Yes	No
7.	**Does your child ever use his/her index finger to point, to indicate interest in something?**	**Yes**	**No**
8.	Can your child play properly with small toys (e.g. cars or blocks) without just mouthing, fiddling, or dropping them?	Yes	No
9.	**Does your child ever bring objects over to you (parent) to show you something?**	**Yes**	**No**
10.	Does your child look you in the eye for more than a second or two?	Yes	No
11.	Does your child ever seem oversensitive to noise? (e.g., plugging ears) **(REVERSE)**	Yes	No
12.	Does your child smile in response to your face or your smile?	Yes	No
13.	**Does your child imitate you? (e.g., you make a face-will your child imitate it?)**	**Yes**	**No**
14.	**Does your child respond to his/her name when you call?**	**Yes**	**No**
15.	**If you point at a toy across the room, does your child look at it?**	**Yes**	**No**
16.	Does your child walk?	Yes	No
17.	Does your child look at things you are looking at?	Yes	No
18.	Does your child make unusual finger movements near his/her face? **(REVERSE)**	Yes	No
19.	Does your child try to attract your attention to his/her own activity?	Yes	No
20.	Have you ever wondered if your child is deaf? **(REVERSE)**	Yes	No
21.	Does your child understand what people say?	Yes	No
22.	Does your child sometimes stare at nothing or wander with no purpose? **(REVERSE)**	Yes	No
23.	Does your child look at your face to check your reaction when faced with something unfamiliar?	Yes	No

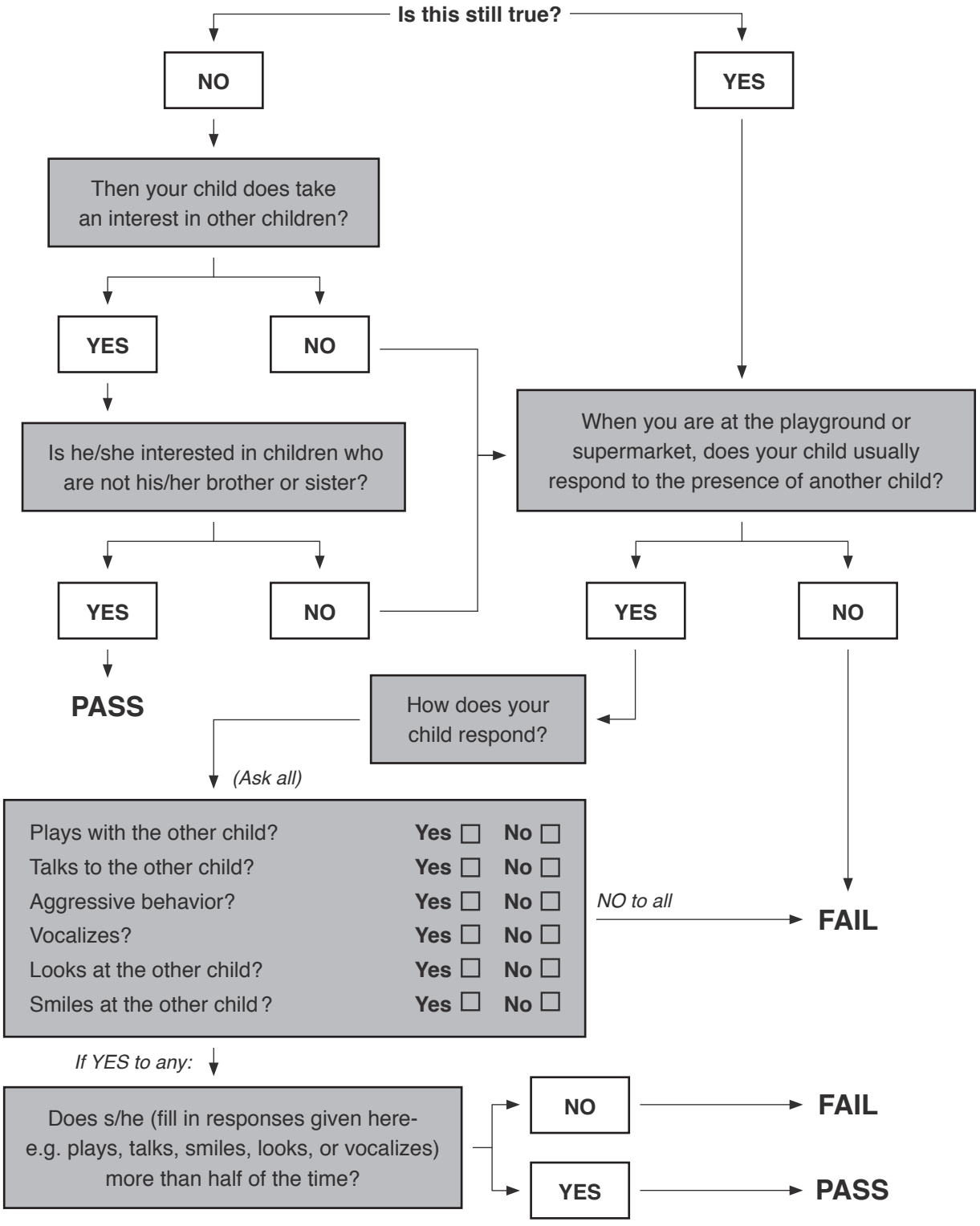
Critical Score: _____

Total Score: _____

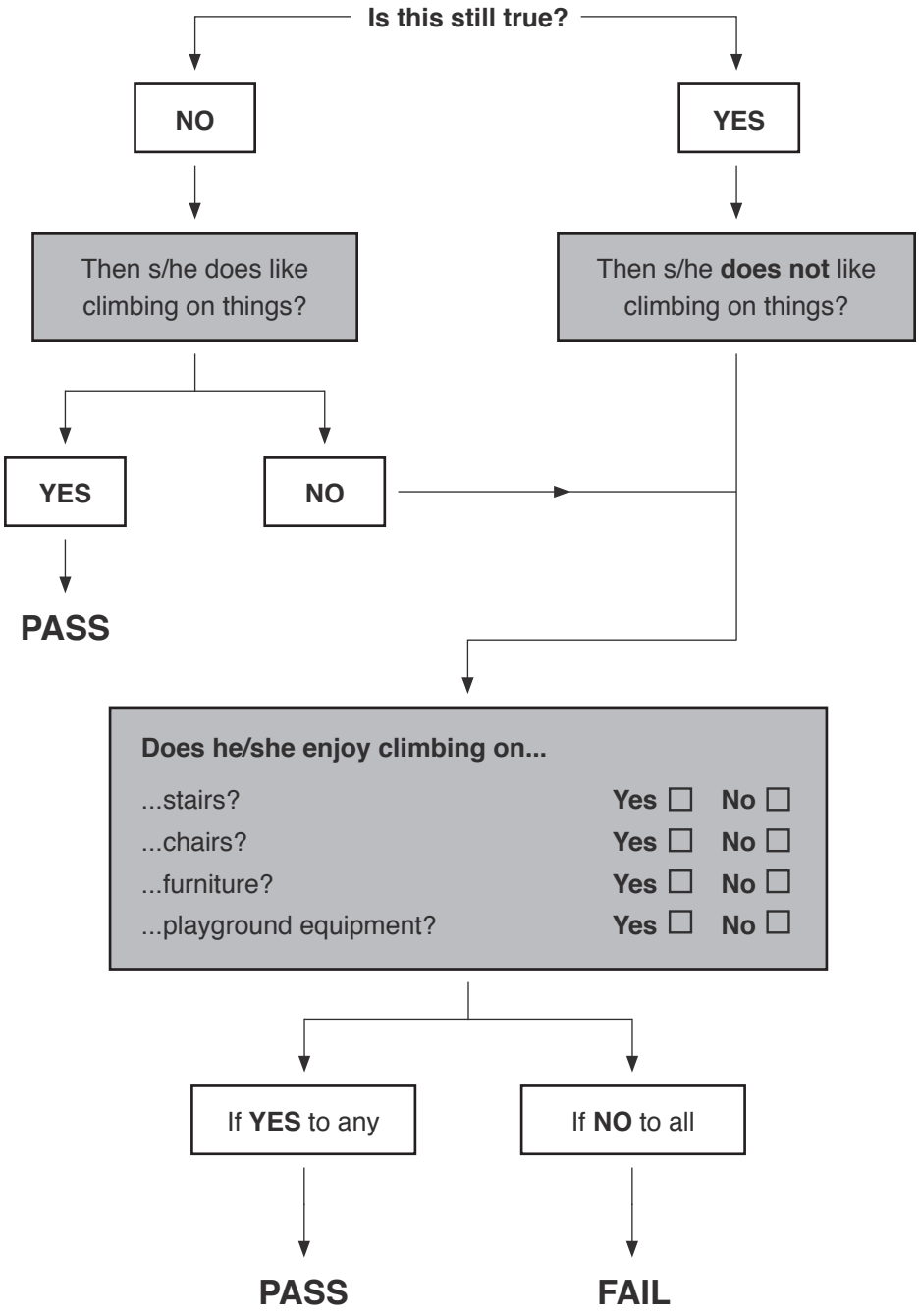
1. You reported that _____ does not enjoy being swung, bounced on your knee, etc.



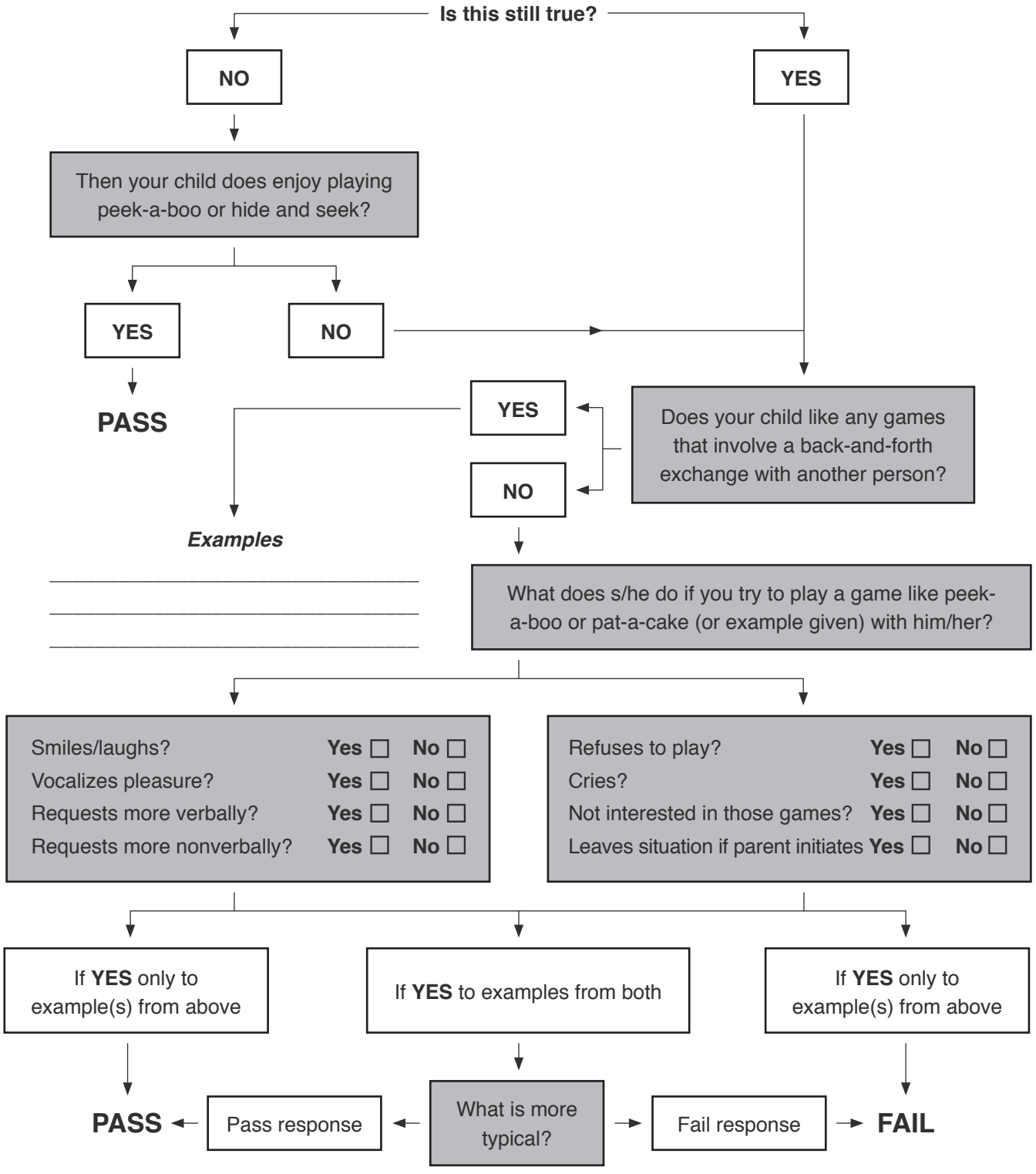
2. You reported that _____ does not take interest in other children. (Critical)



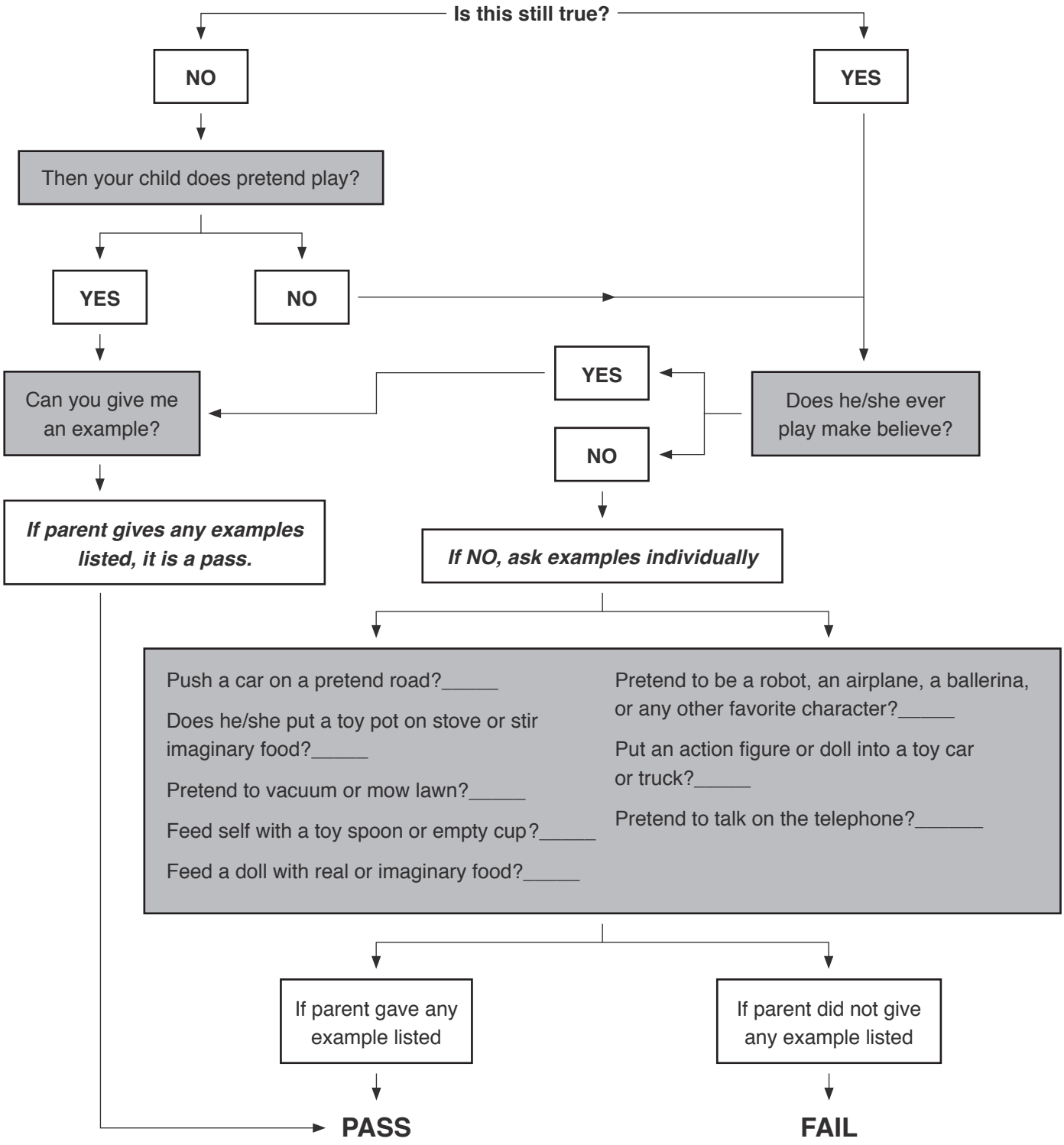
3. You reported that _____ does not like climbing on things, such as up stairs.



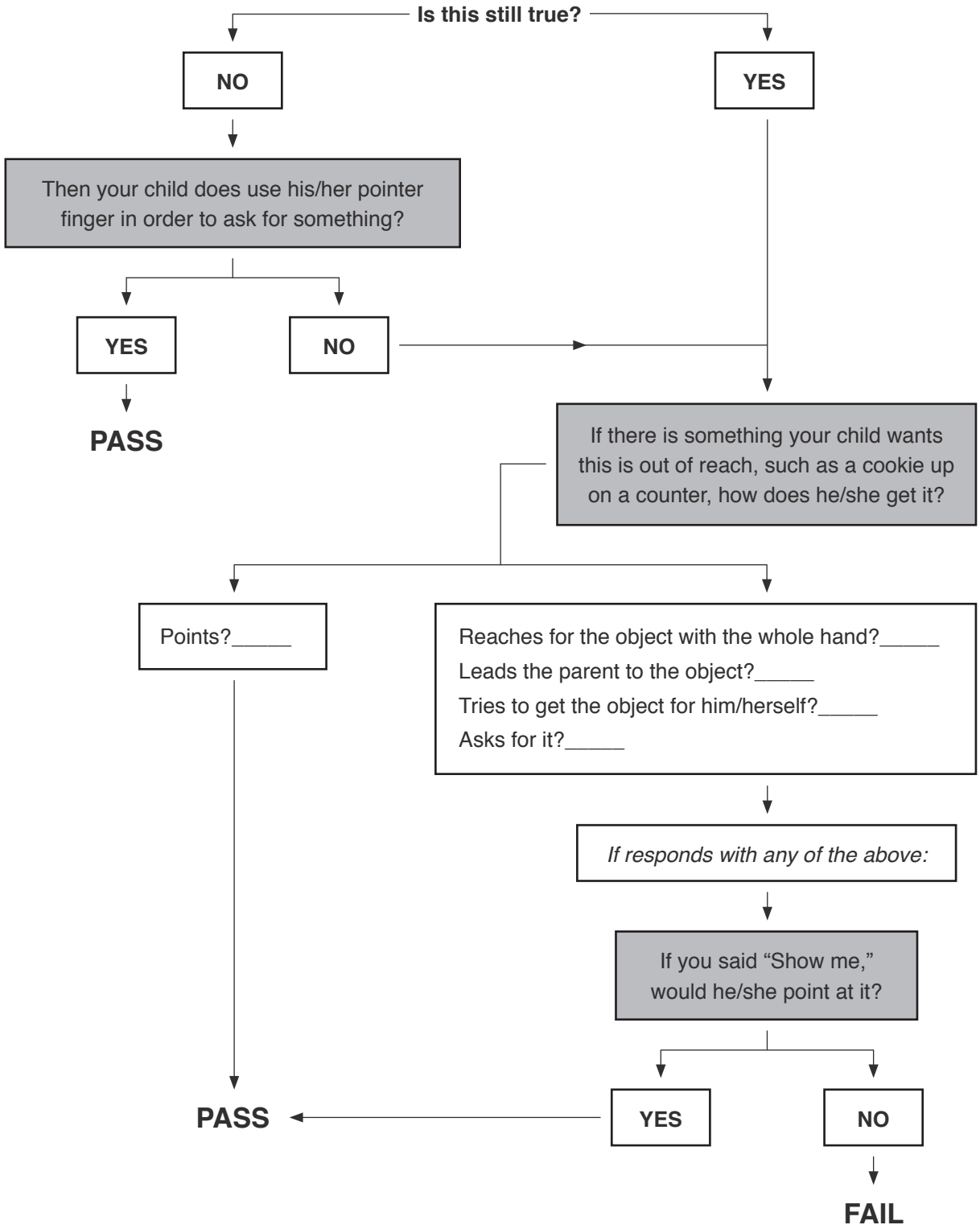
4. You reported that _____ does not enjoy playing peek-a-boo / hide-and-seek.



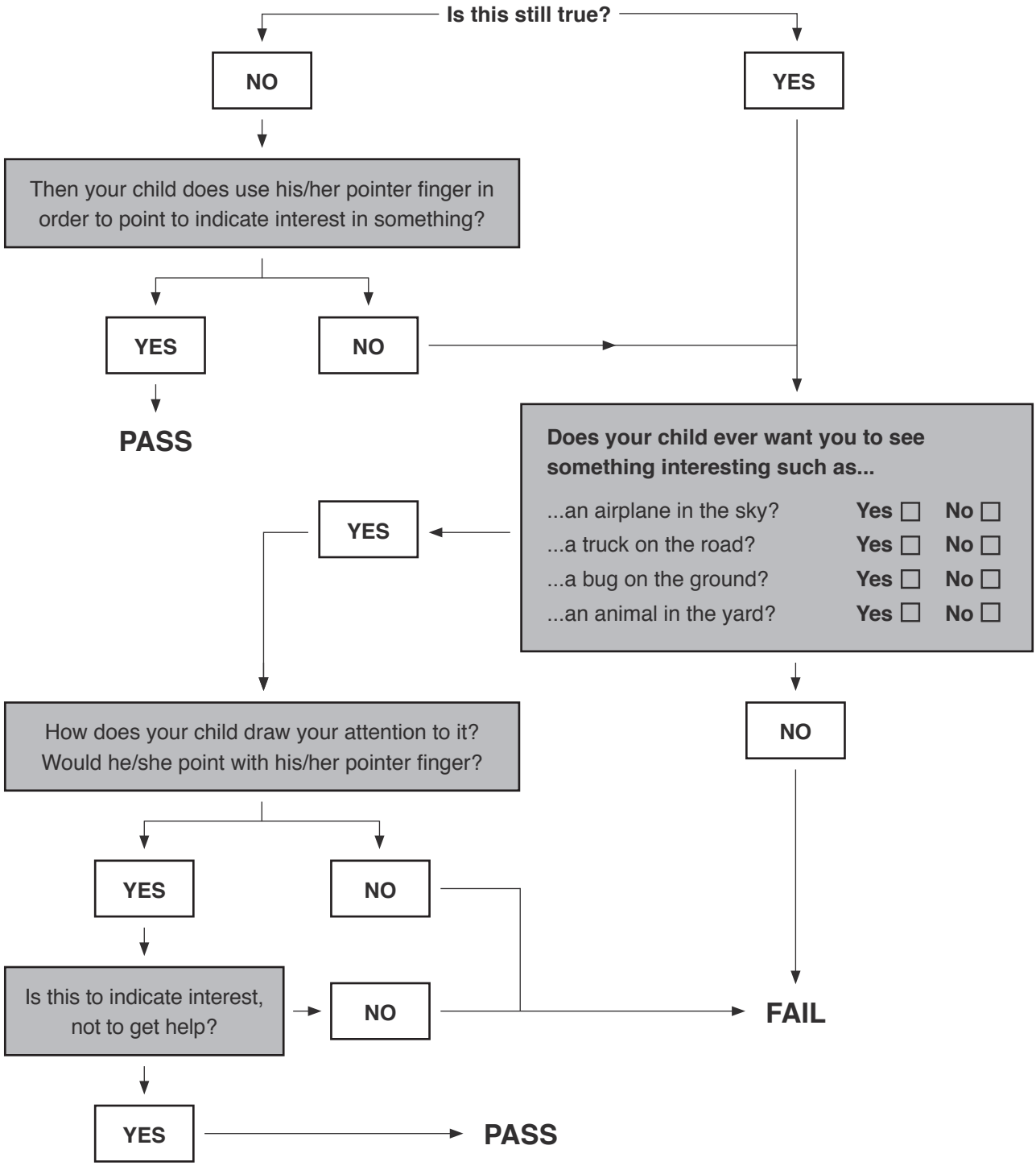
5. You reported that _____ does not ever pretend, for example, to talk on the phone or take care of dolls, or pretend other things.



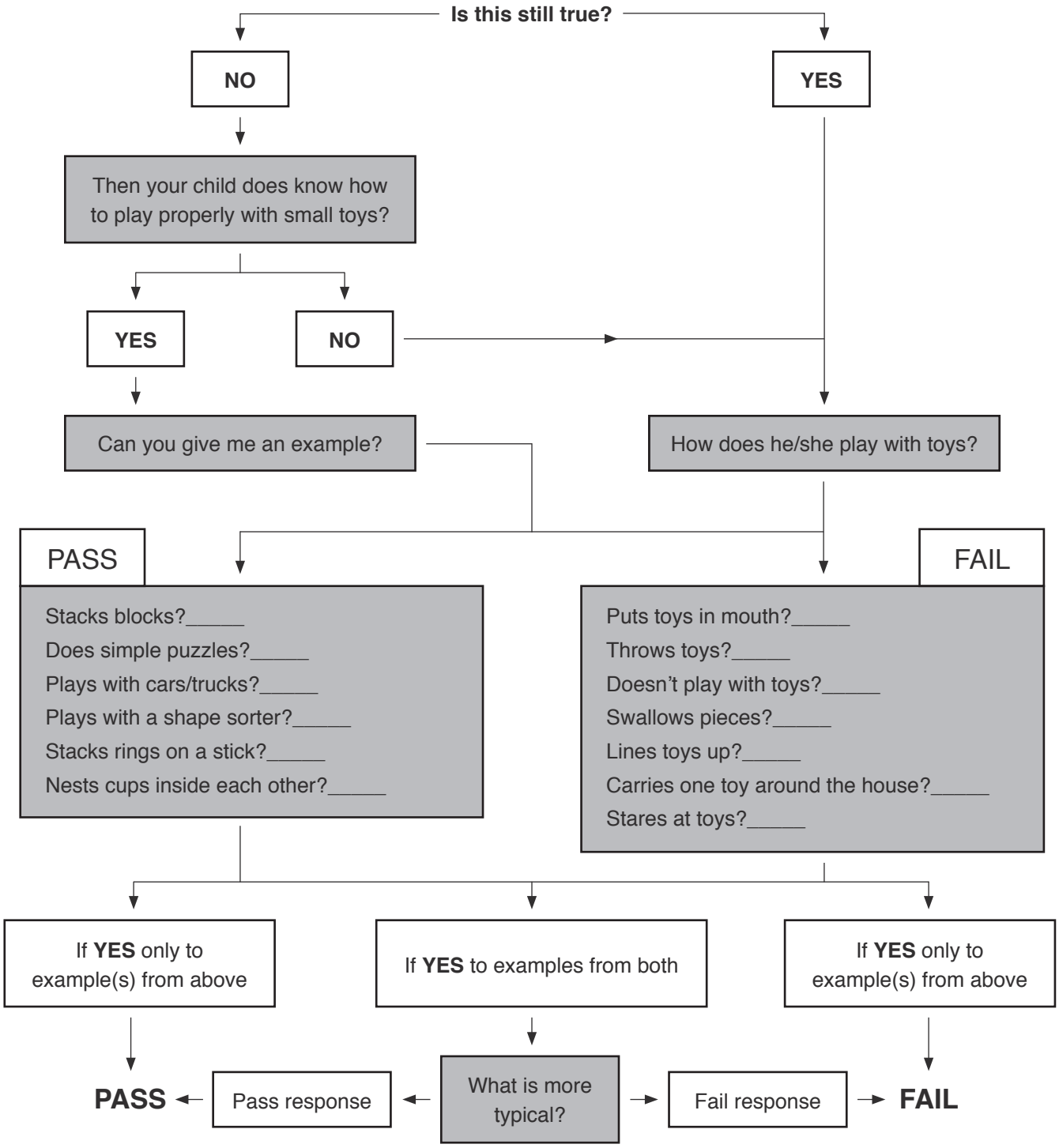
6. You reported that _____ does not use his/her pointer finger to point, to ask for something.



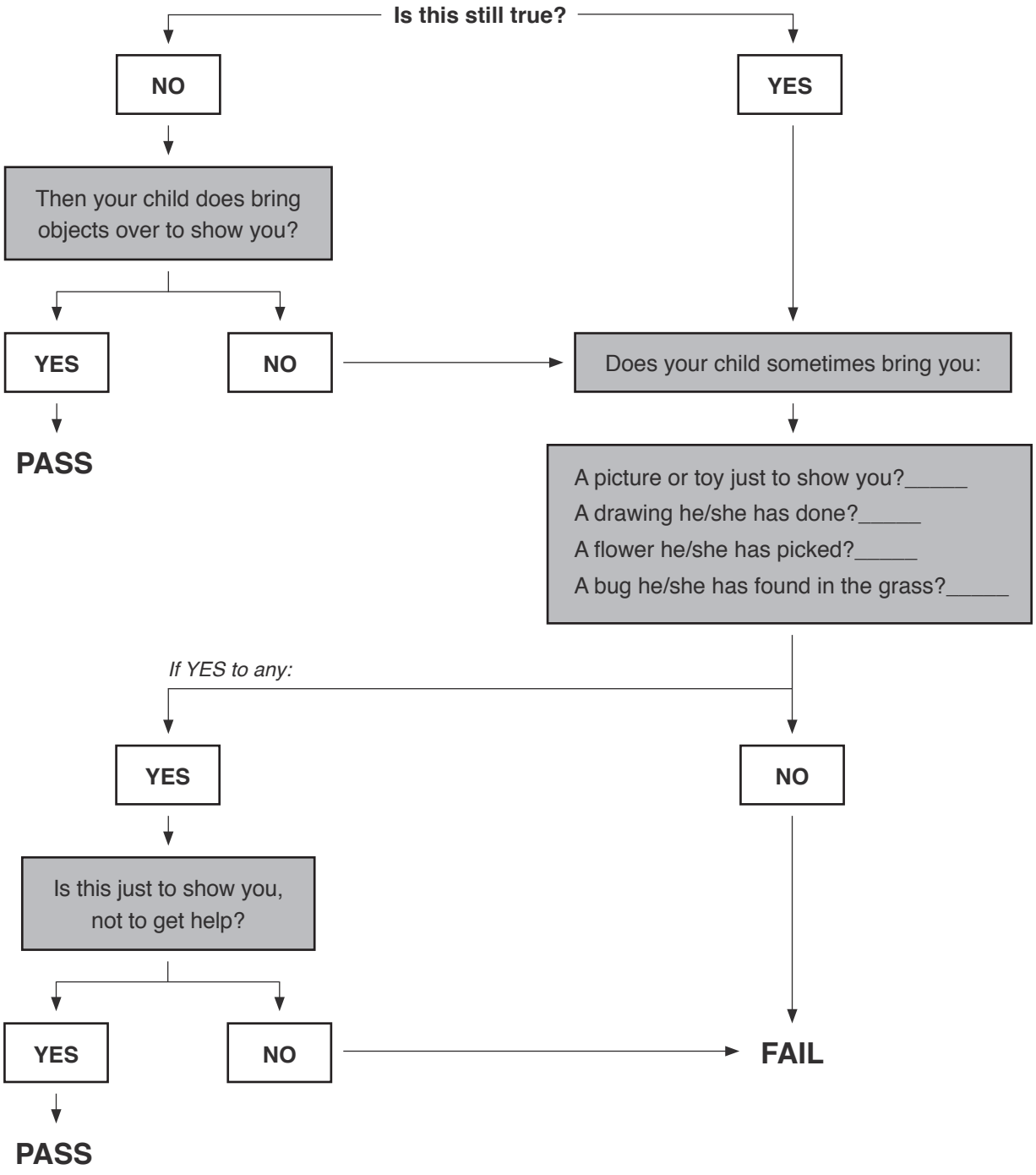
7. You reported that _____ does not use his/her pointer finger to point, to indicate interest in something, (Critical)



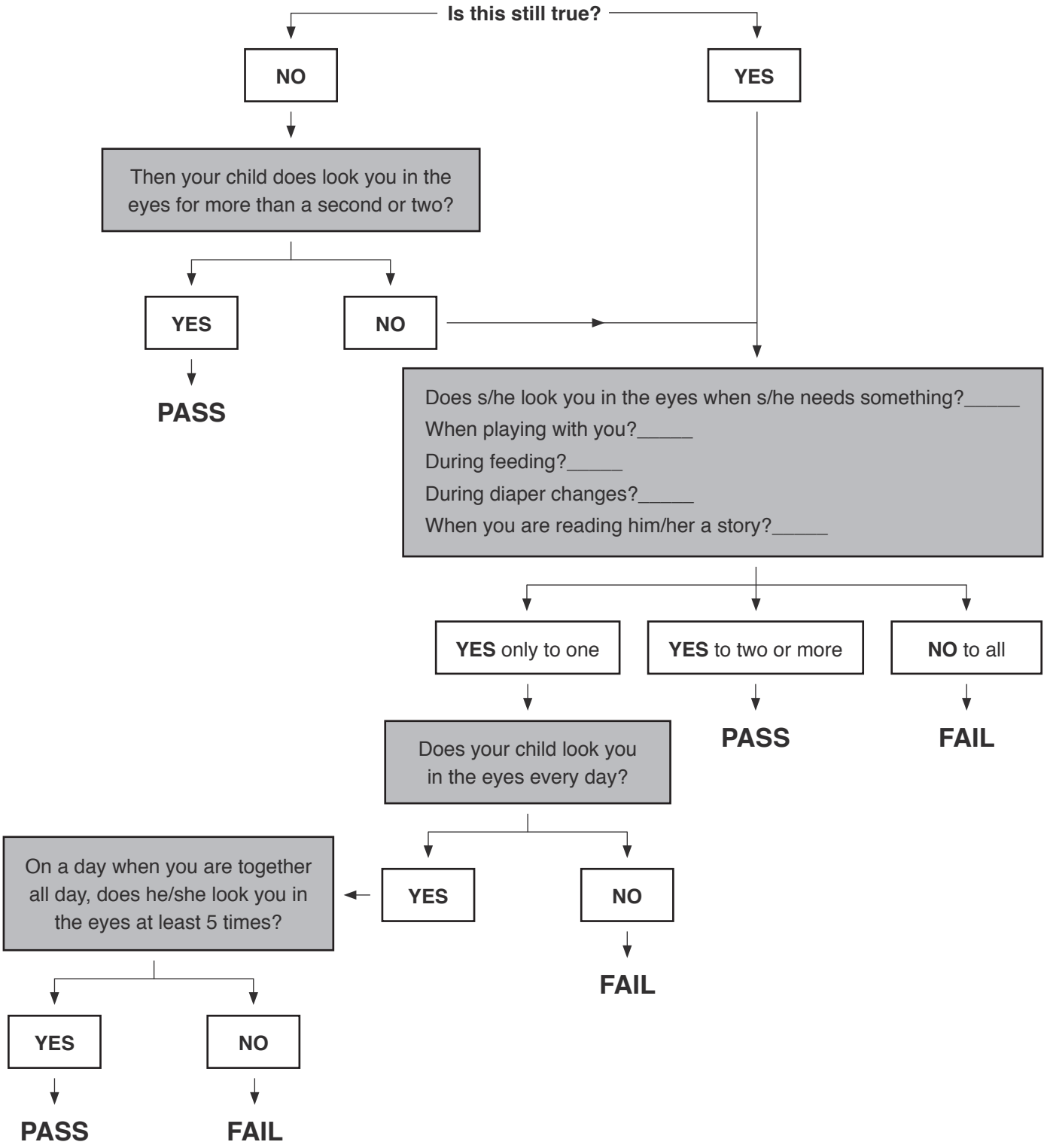
8. You reported that _____ does not play properly with small toys (e.g. cars or blocks) without just mouthing, fiddling, or dropping them.



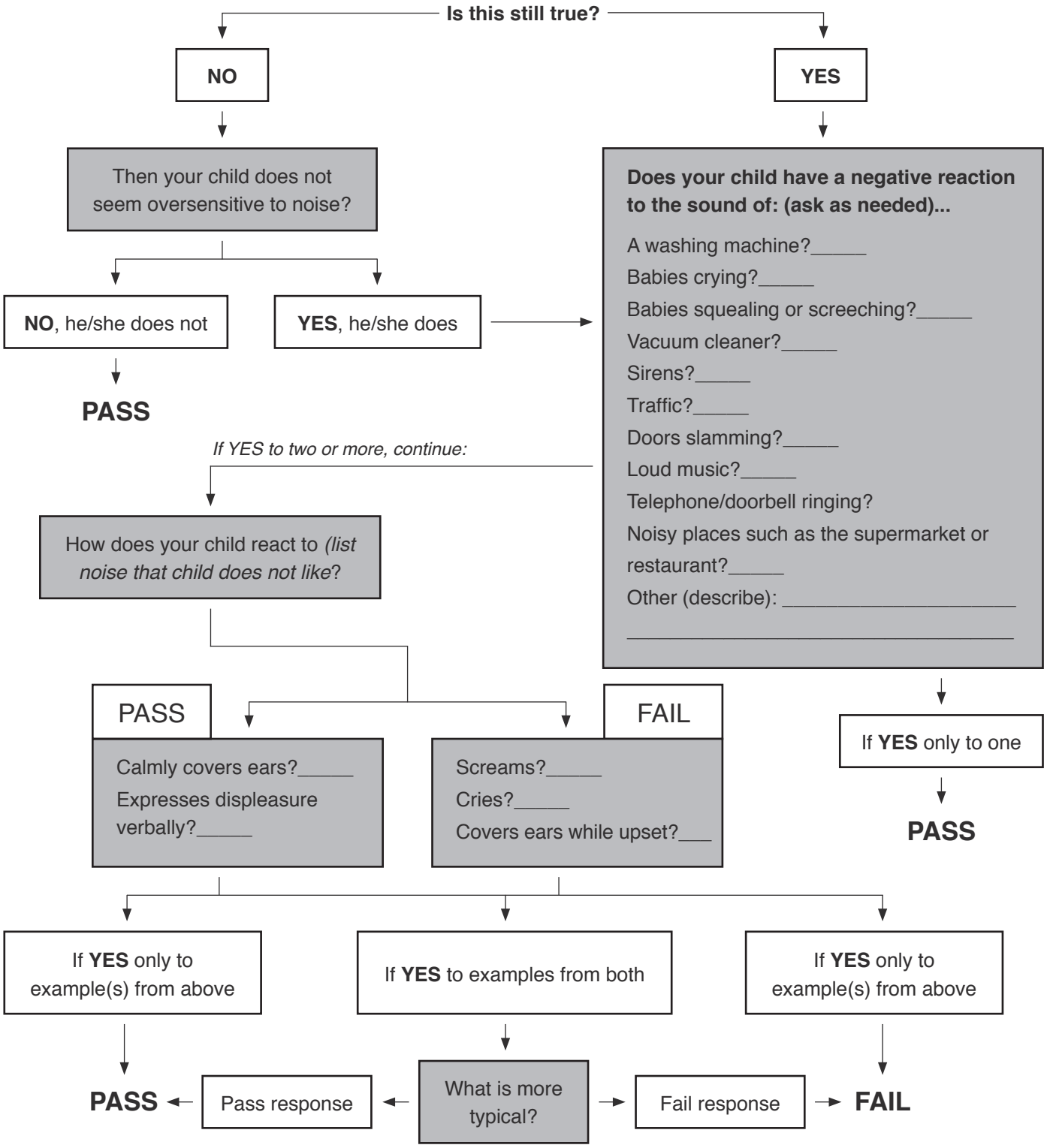
9. You reported that _____ does not bring objects over to you (parent) to show you something. (Critical)



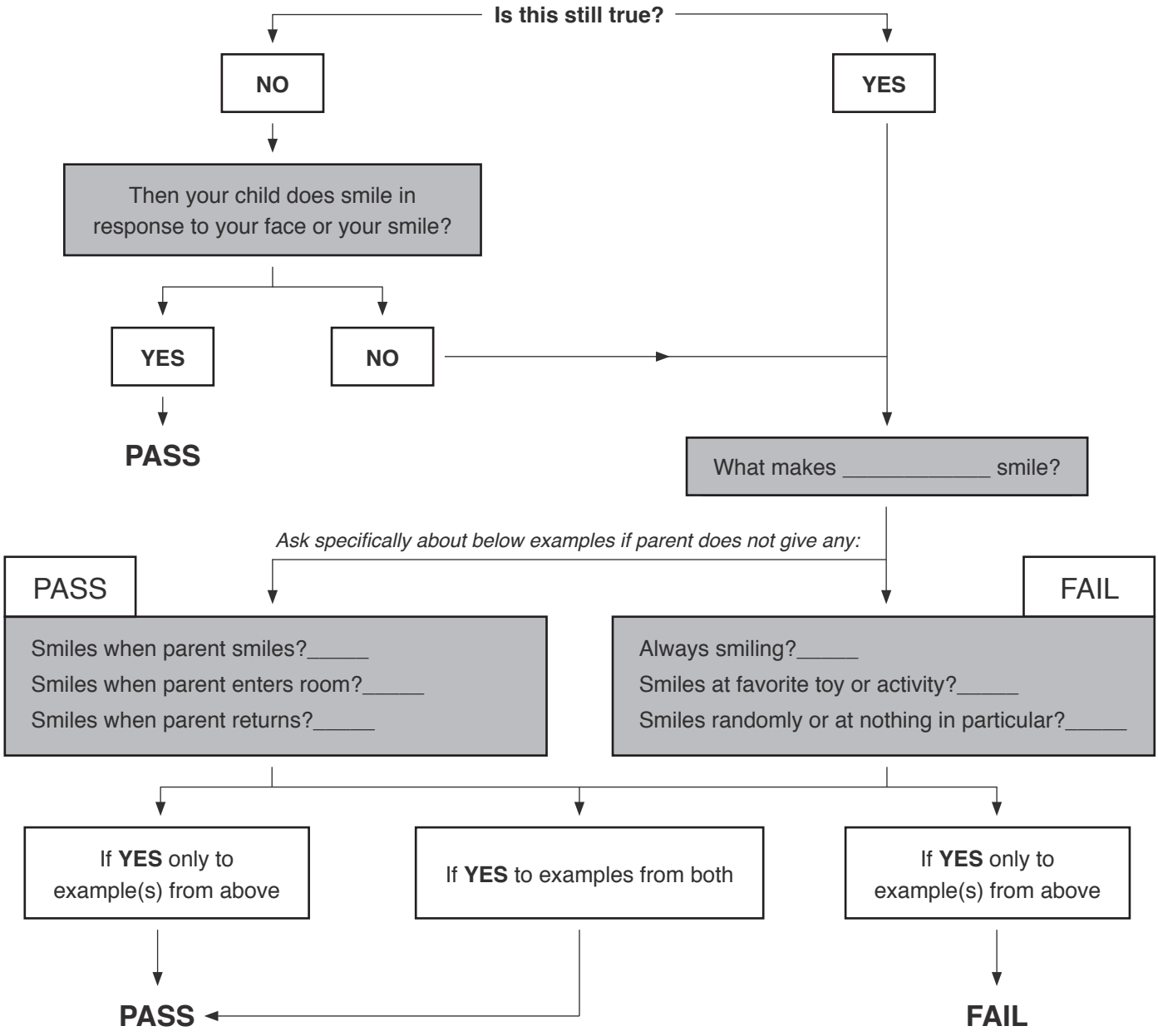
10. You reported that _____ does not look you in the eye for more than a second or two.



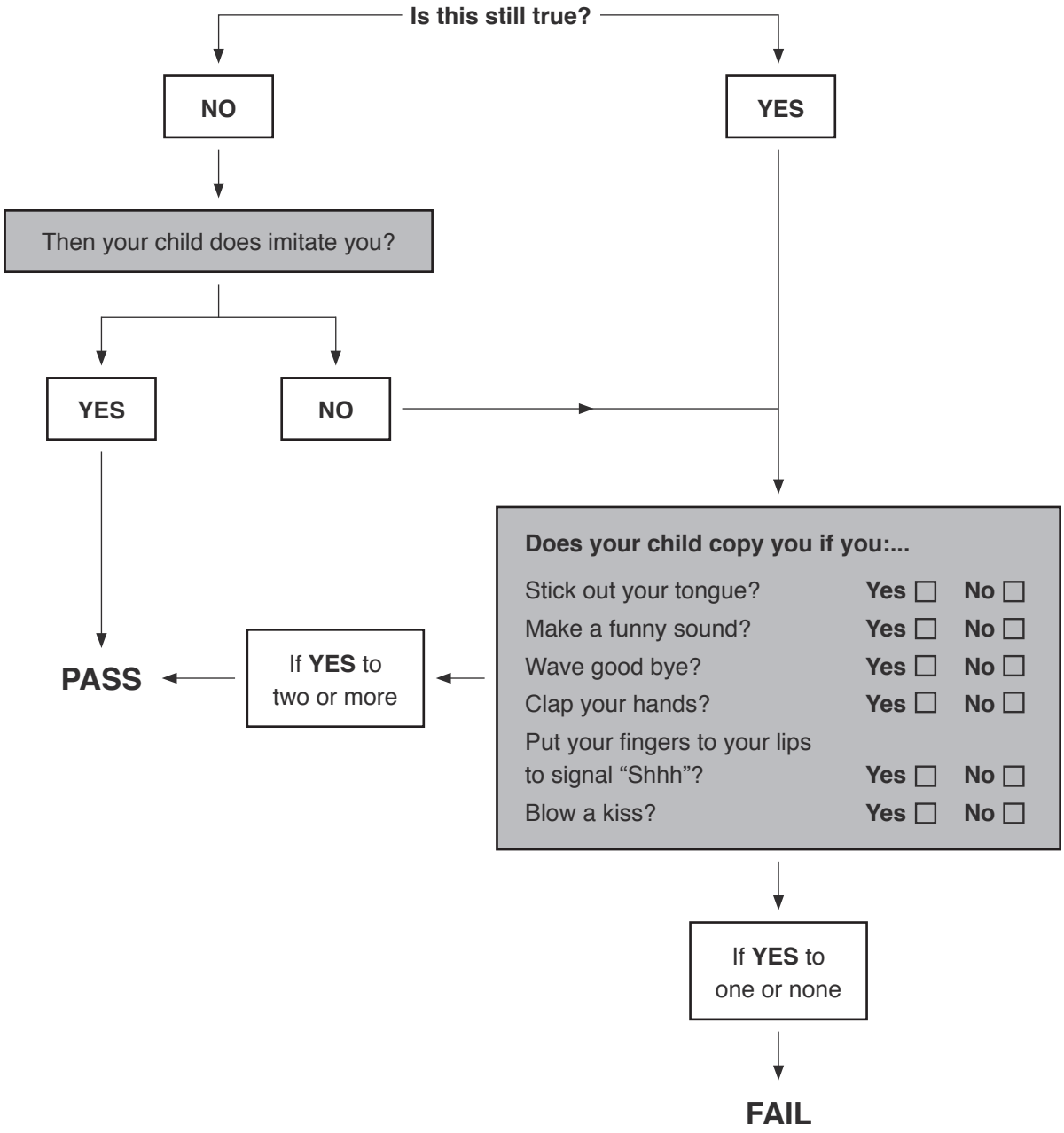
11. You reported that _____ sometimes seems oversensitive to noise.



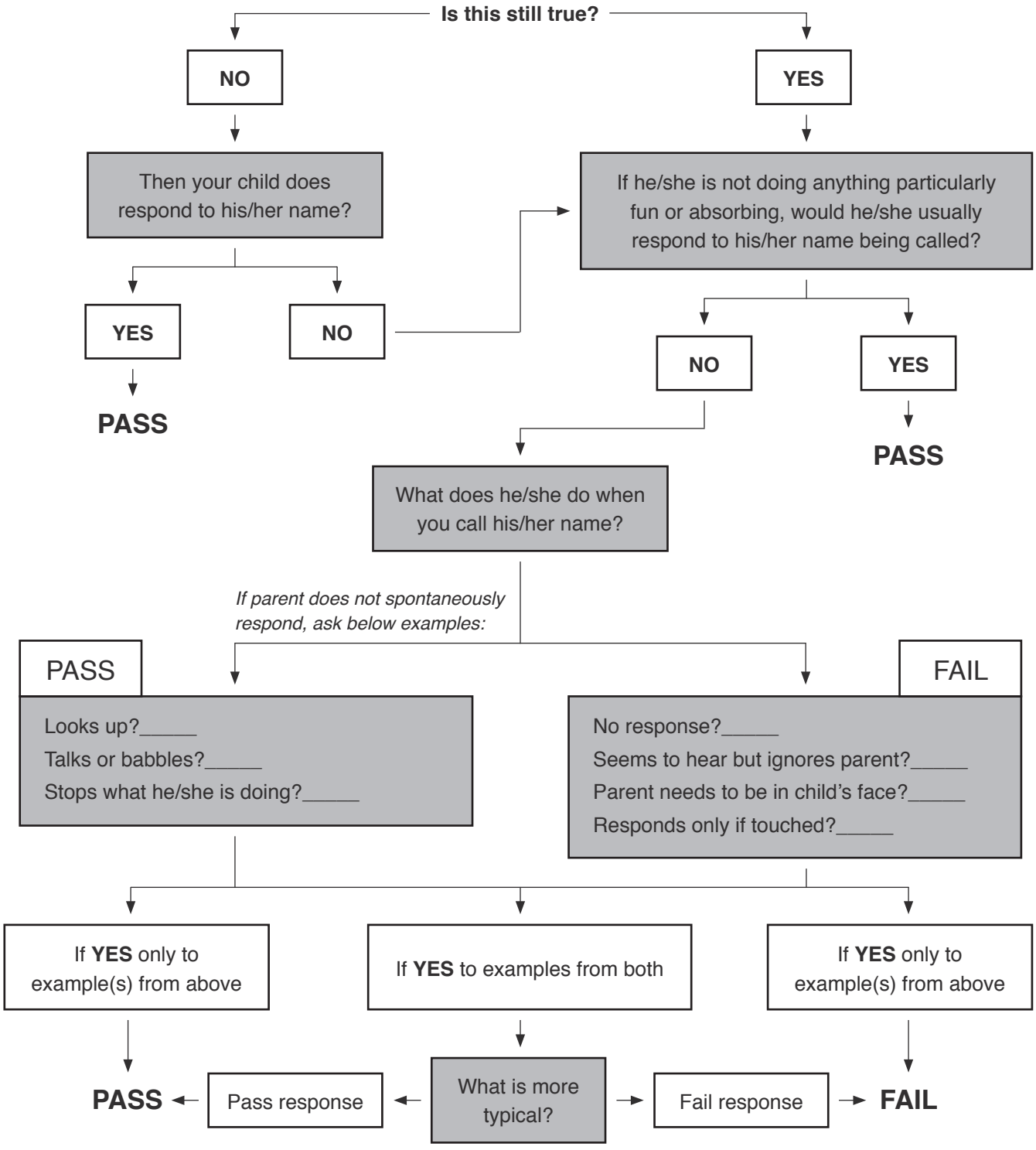
12. You reported that _____ does not smile in response to your face or your smile.



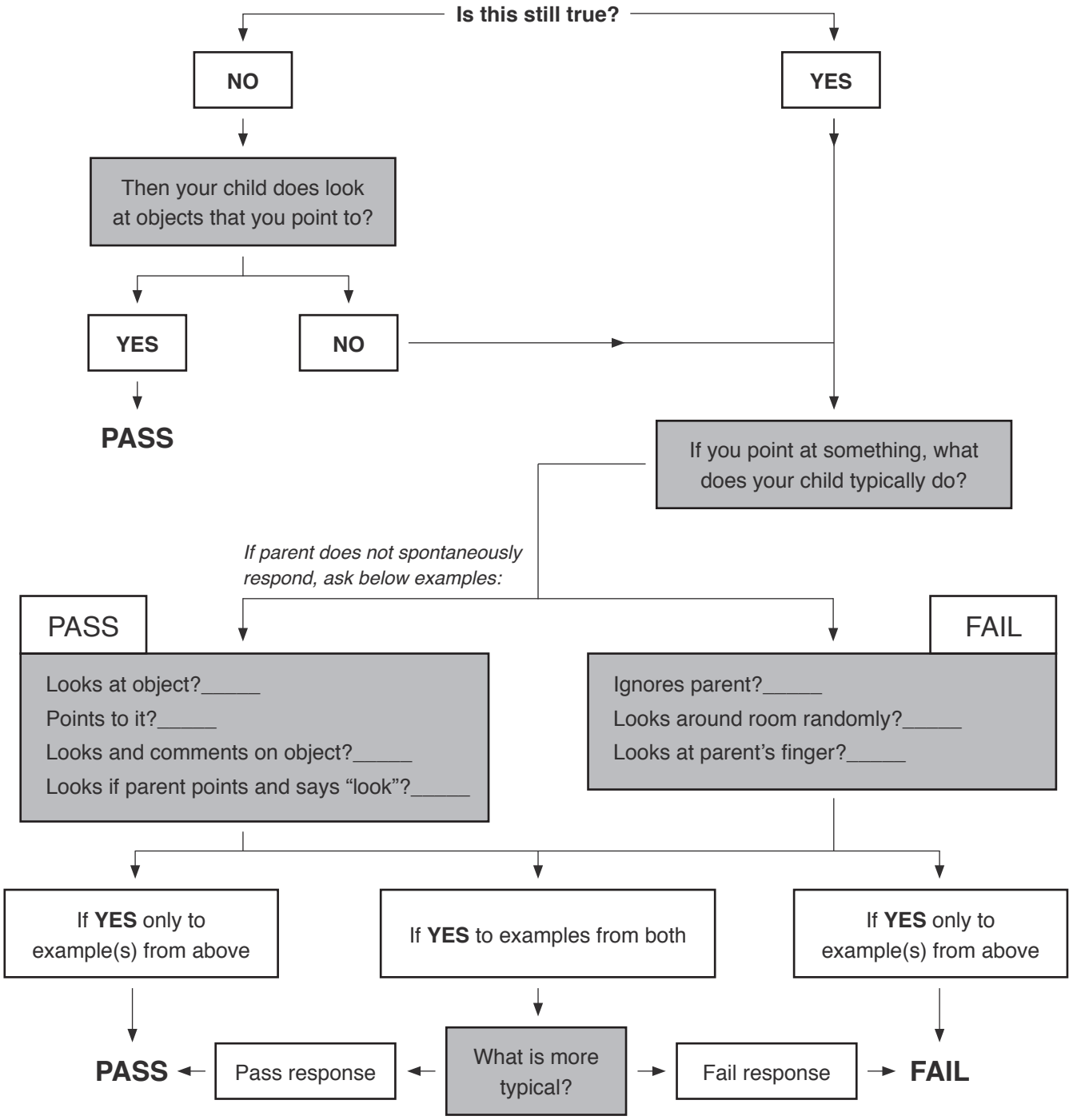
13. You reported that _____ does not usually imitate you. (Critical)



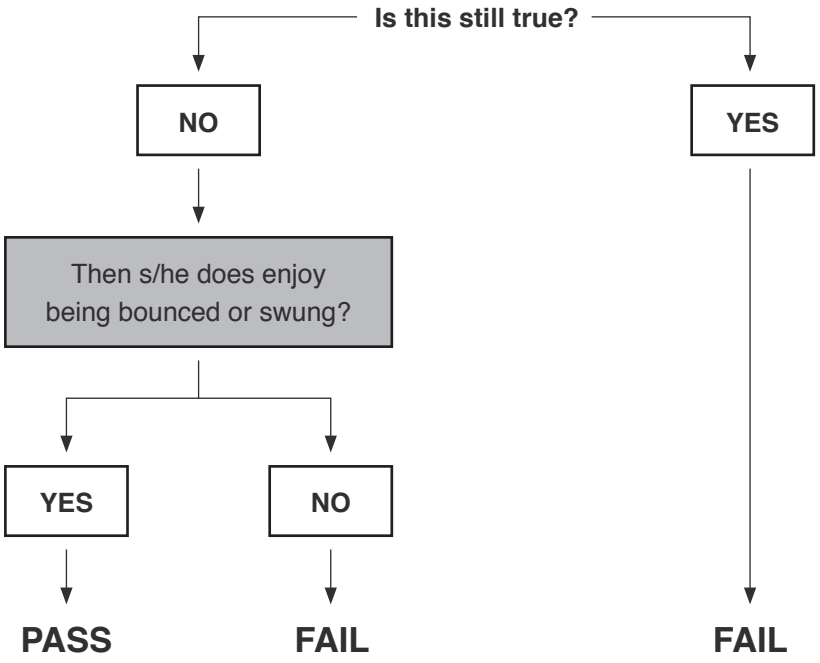
14. You reported that _____ does not respond to his/her name when you call. (Critical)



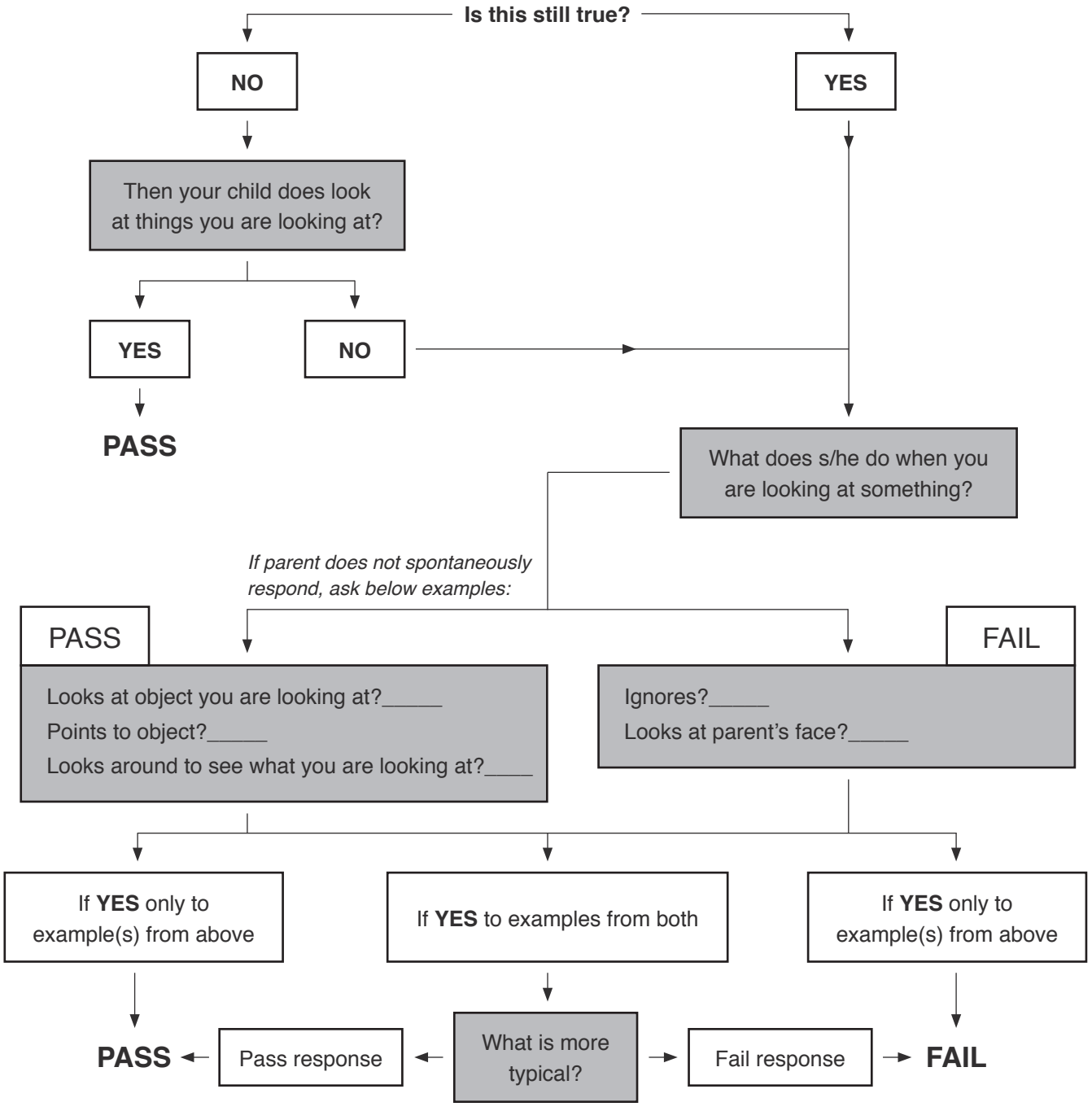
15. You reported that if you point at a toy across the room, _____ does not look at it. (Critical)



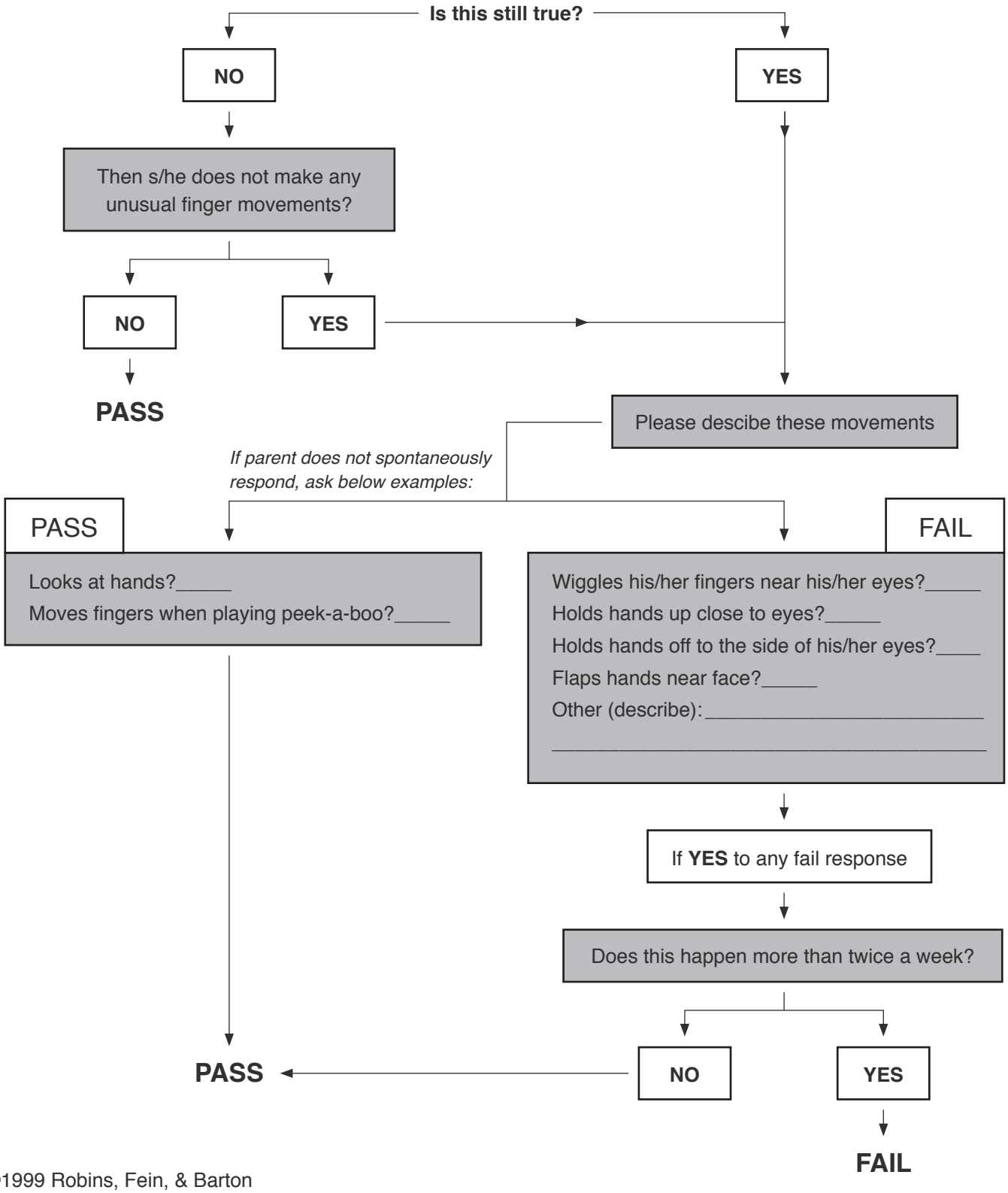
16. You reported that your child does not walk.



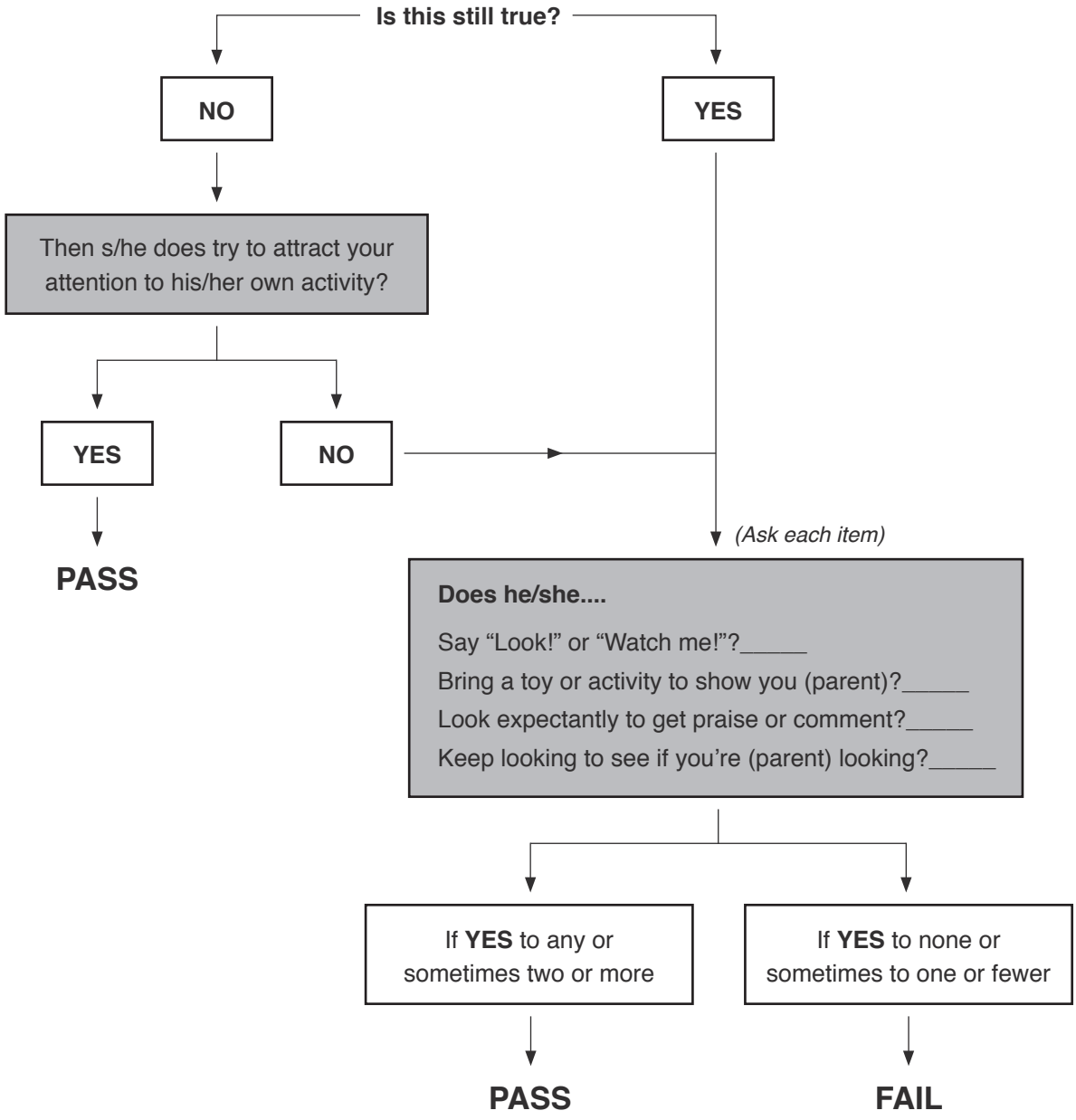
17. You reported that _____ does not look at things you are looking at.



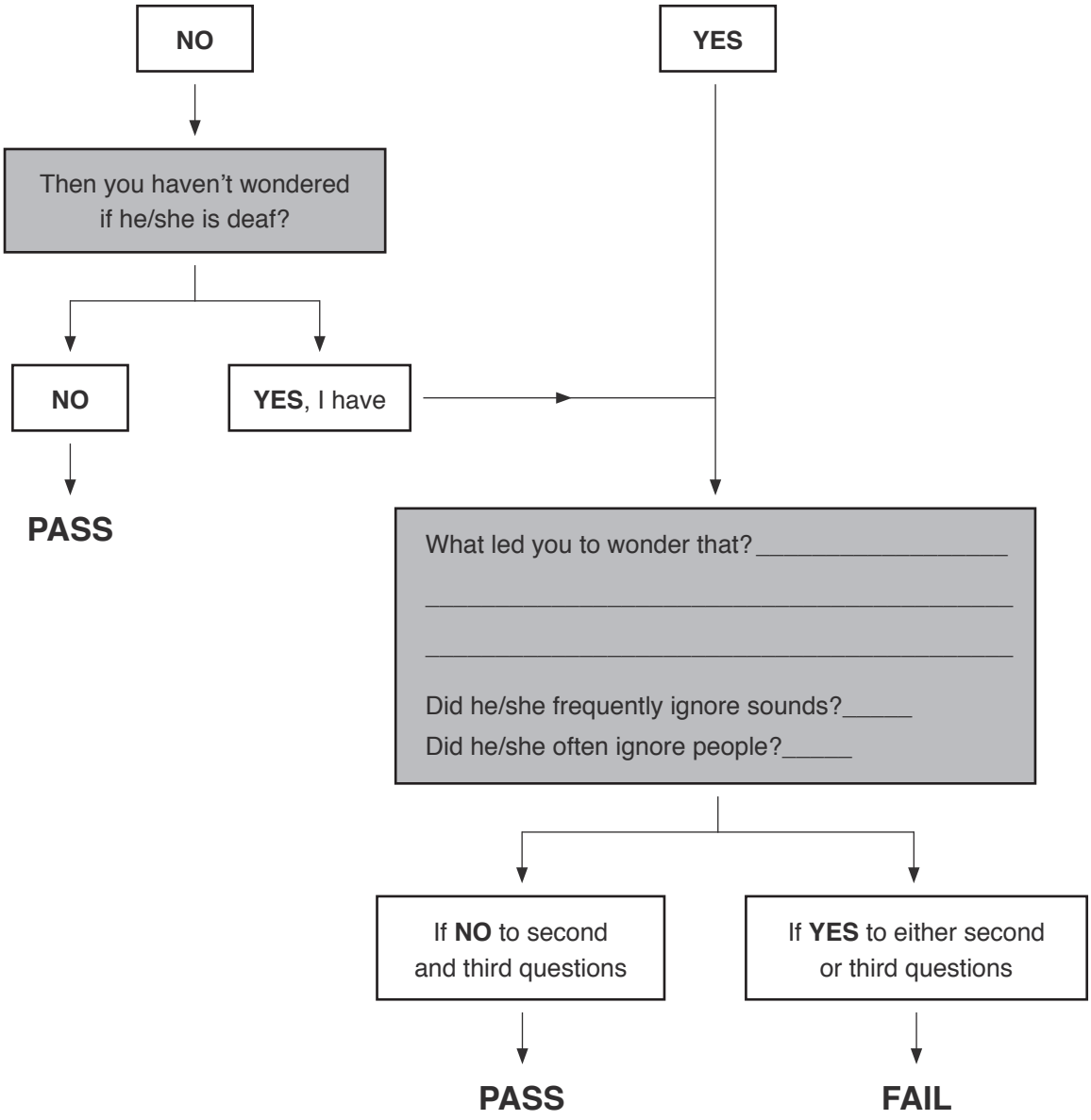
18. You reported that _____ makes unusual finger movements near his/her face.



19. You reported that _____ does not try to attract your attention to his/her own activity.



20. Have you wondered if your child is deaf?



Ask all parents:

Has your child's hearing been tested? *If YES*, what were the results?

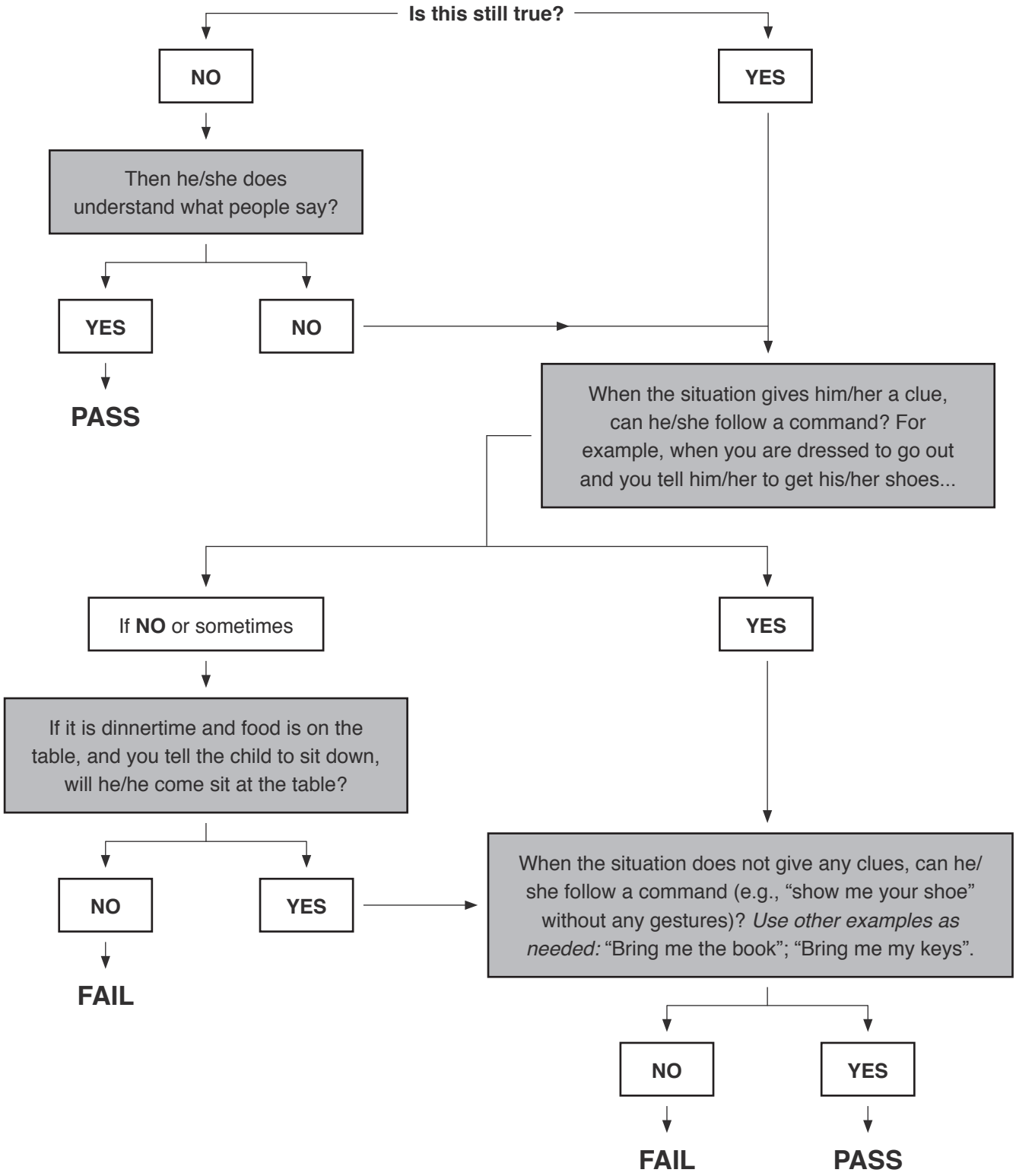
Note results: _____ Hearing impaired _____ Hearing in normal range

- If hearing is impaired > PASS

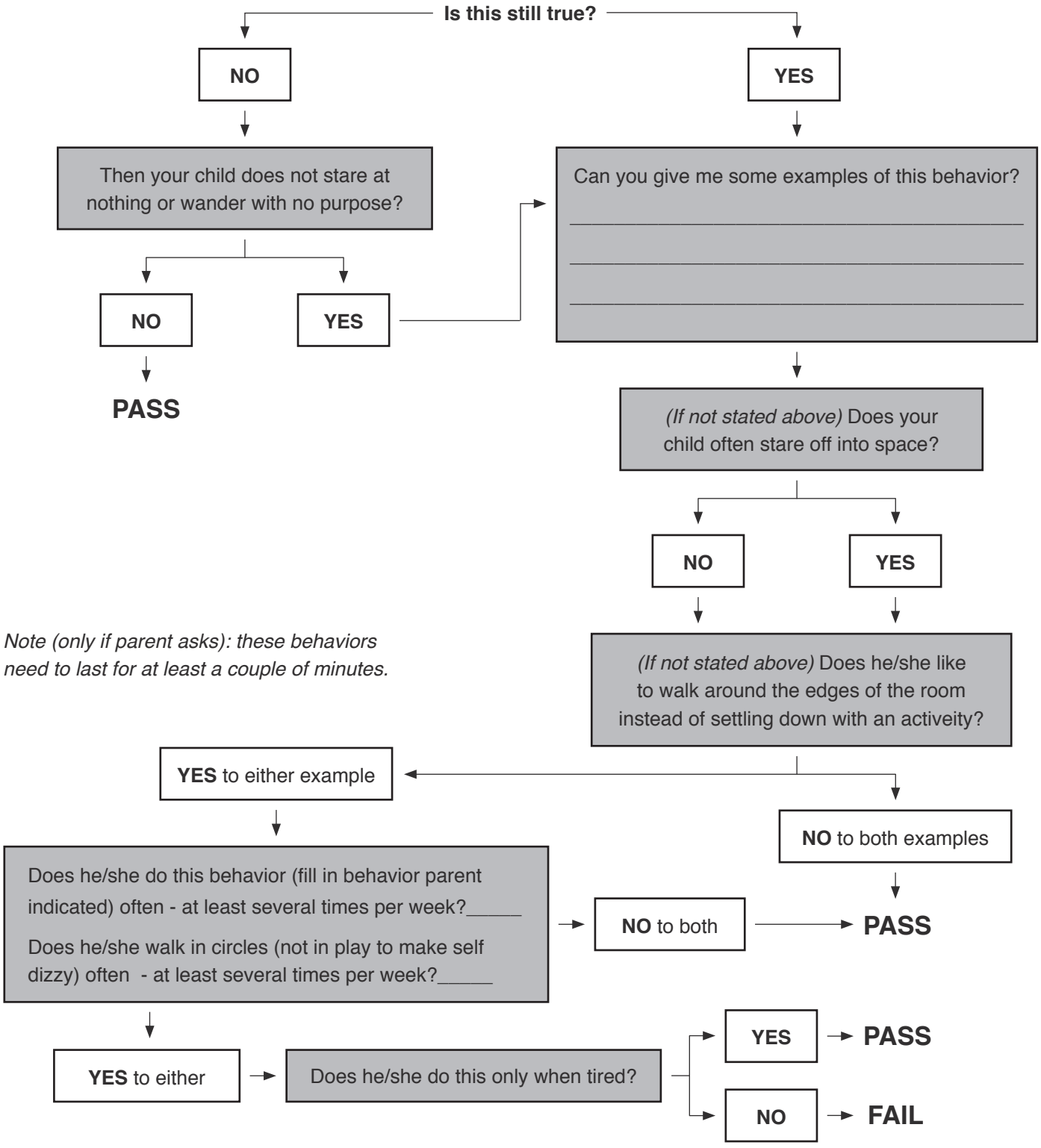
- If parents report that they wondered about their child's hearing only as part of a routine checkup > PASS

- Regardless of hearing test results, if child ignores sounds or people > FAIL

21. You reported that _____ does not understand what people say.

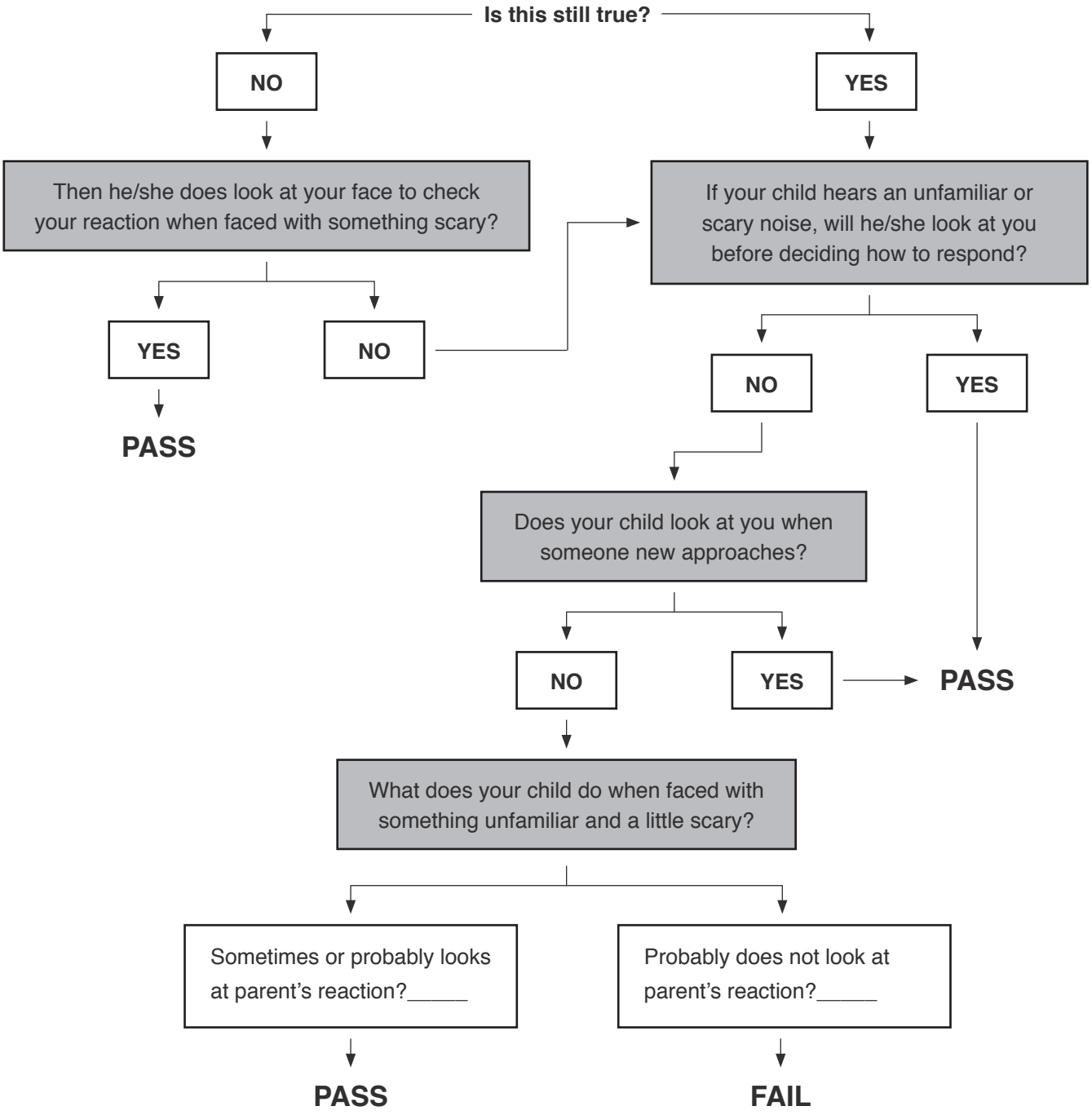


22. You reported that _____ sometimes stares at nothing or wanders with no purpose.



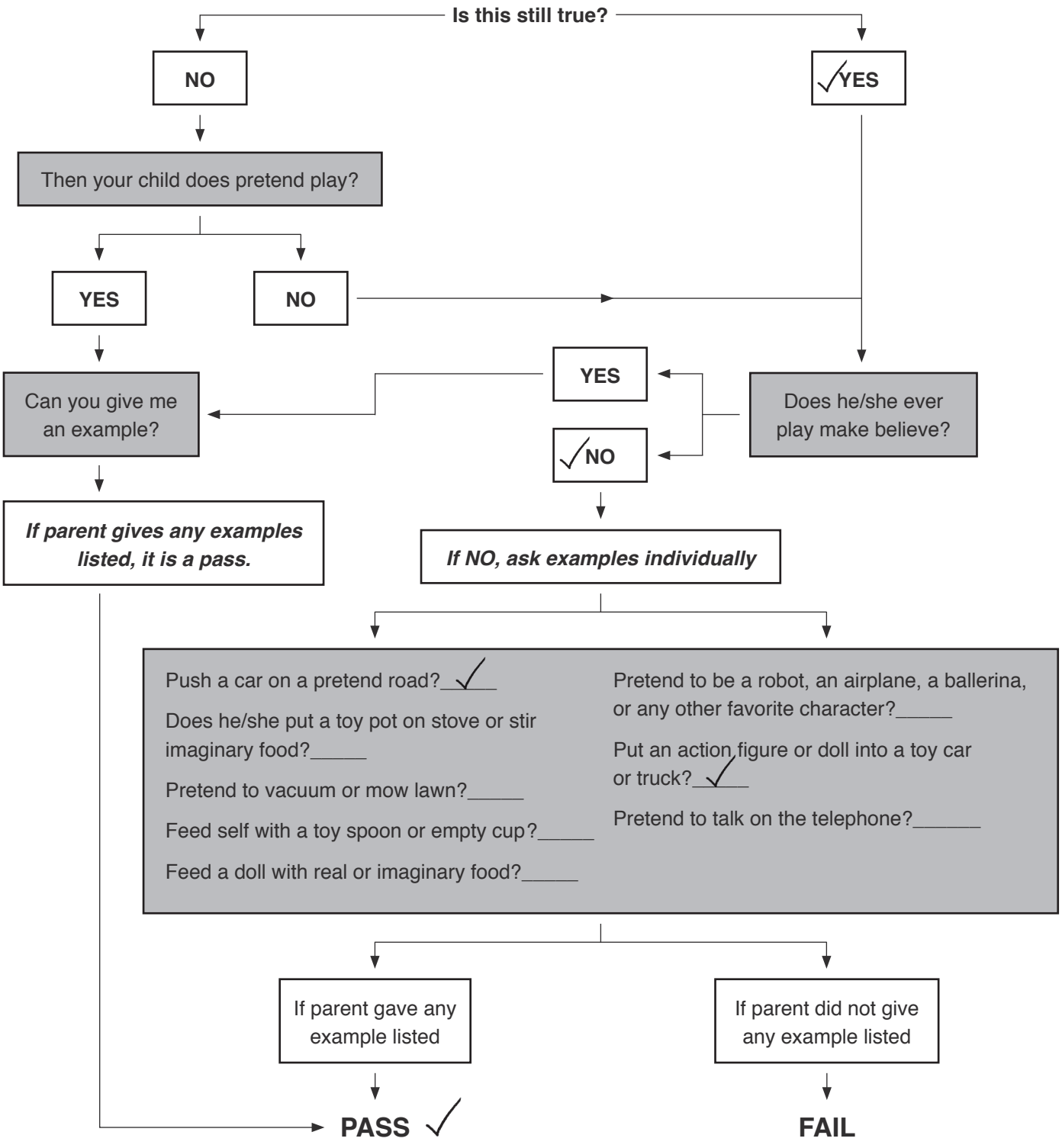
Note (only if parent asks): these behaviors need to last for at least a couple of minutes.

23. You reported that _____ does not usually look at your face to check your reaction when faced with something unfamiliar and a little scary.

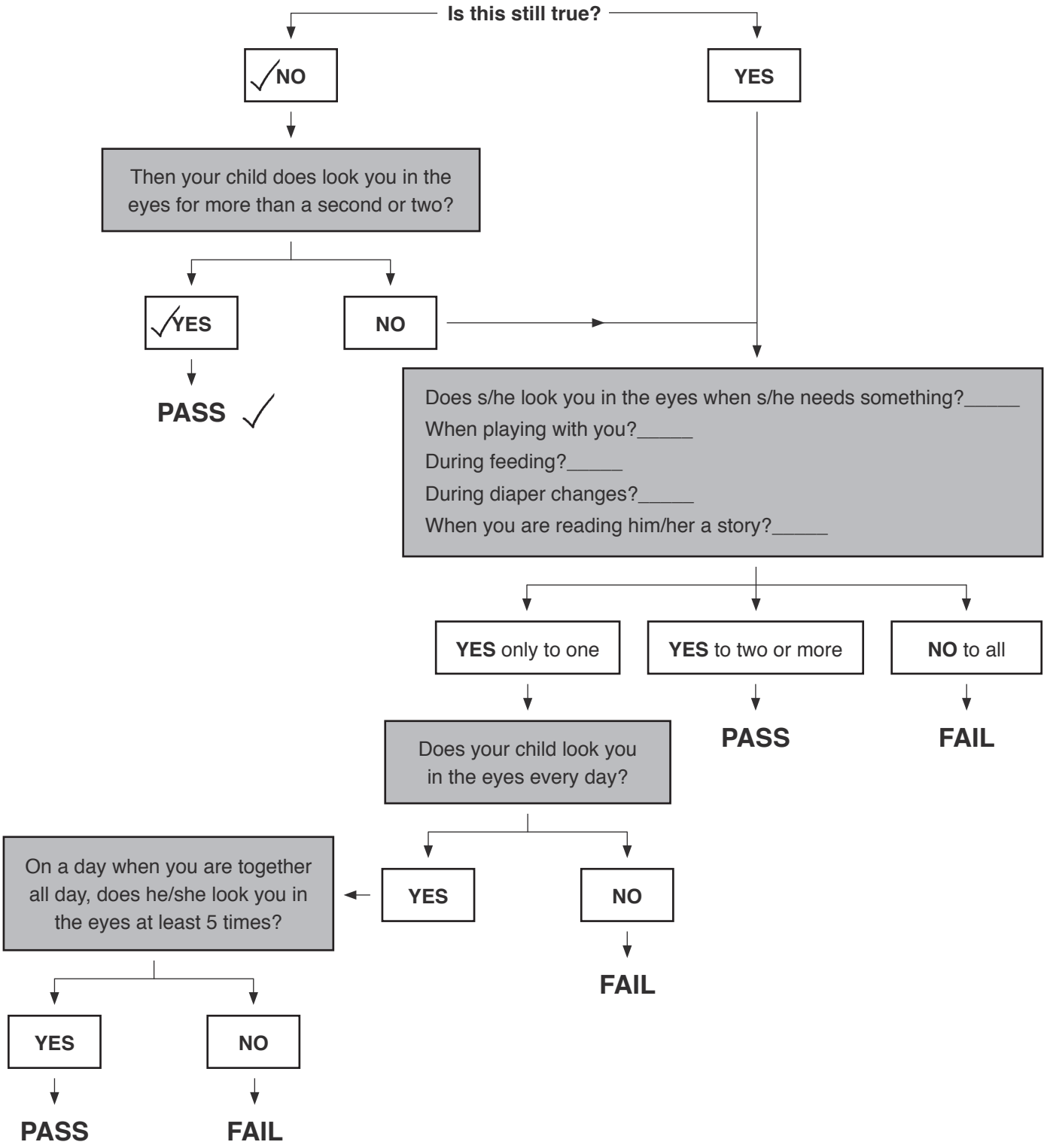


Handout VIII: M-CHAT Follow-Up Interview for Matthew:30

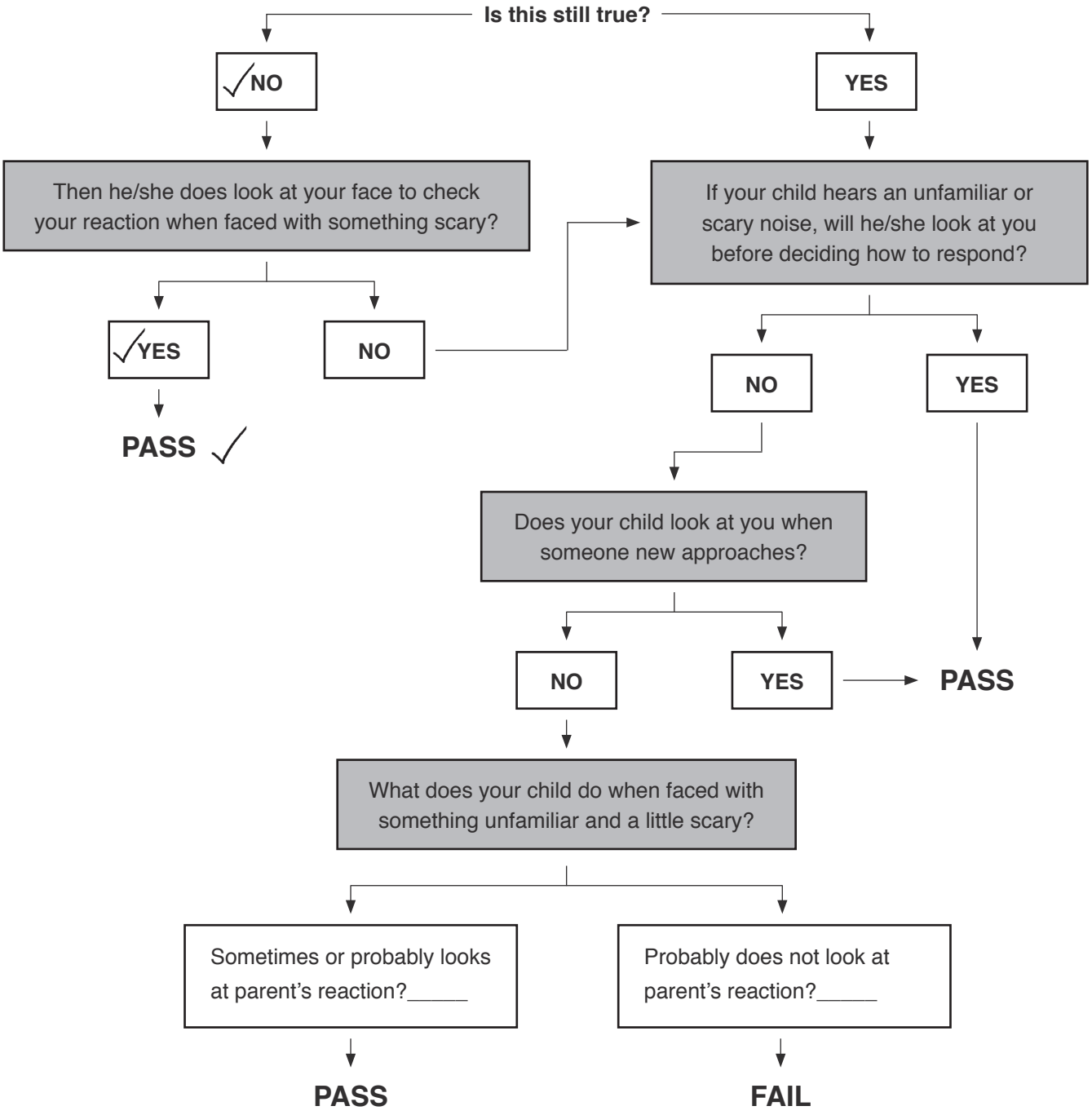
5. You reported that Matthew does not ever pretend, for example, to talk on the phone or take care of dolls, or pretend other things.



10. You reported that Matthew does not look you in the eye for more than a second or two.

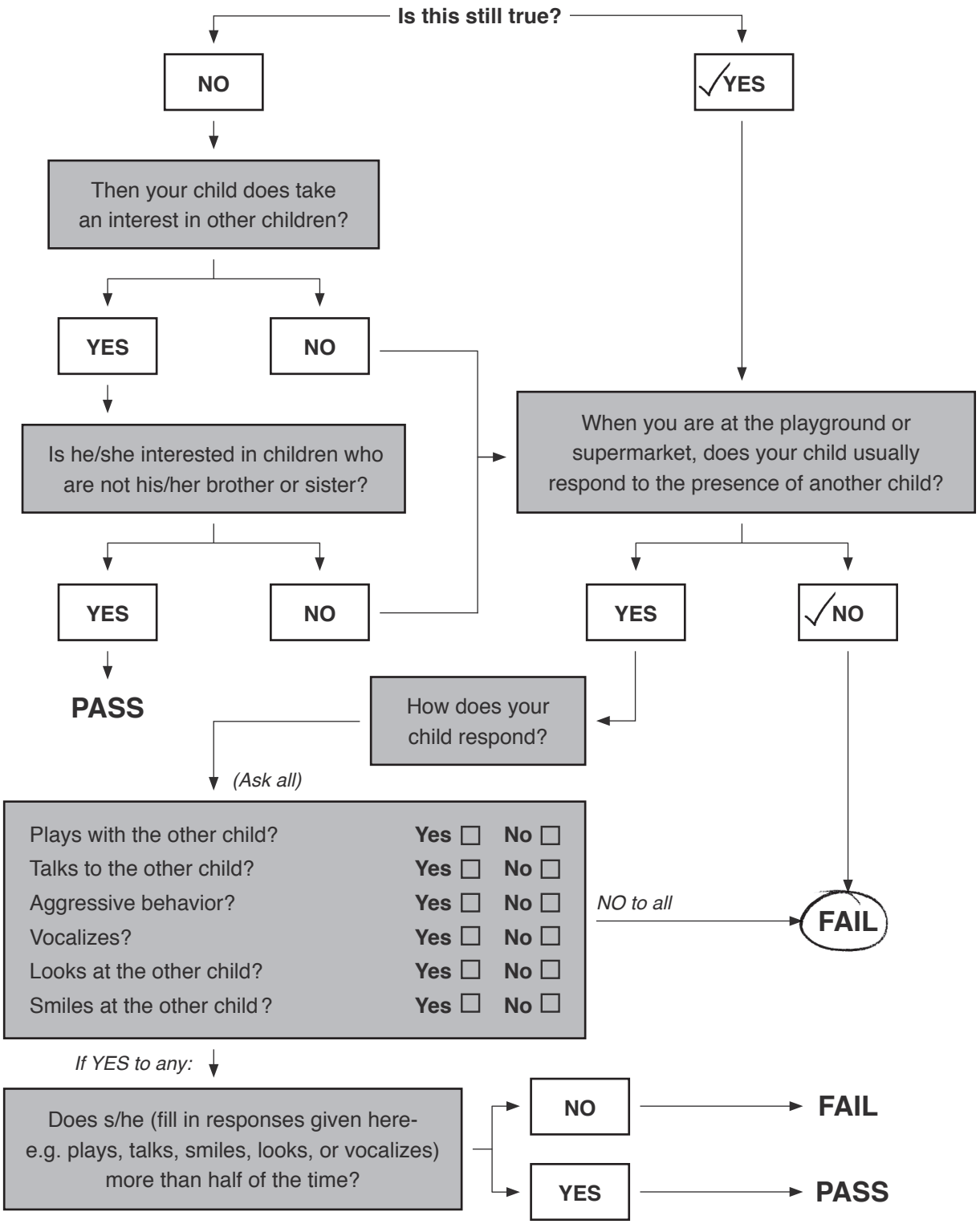


23. You reported that Matthew does not usually look at your face to check your reaction when faced with something unfamiliar and a little scary.

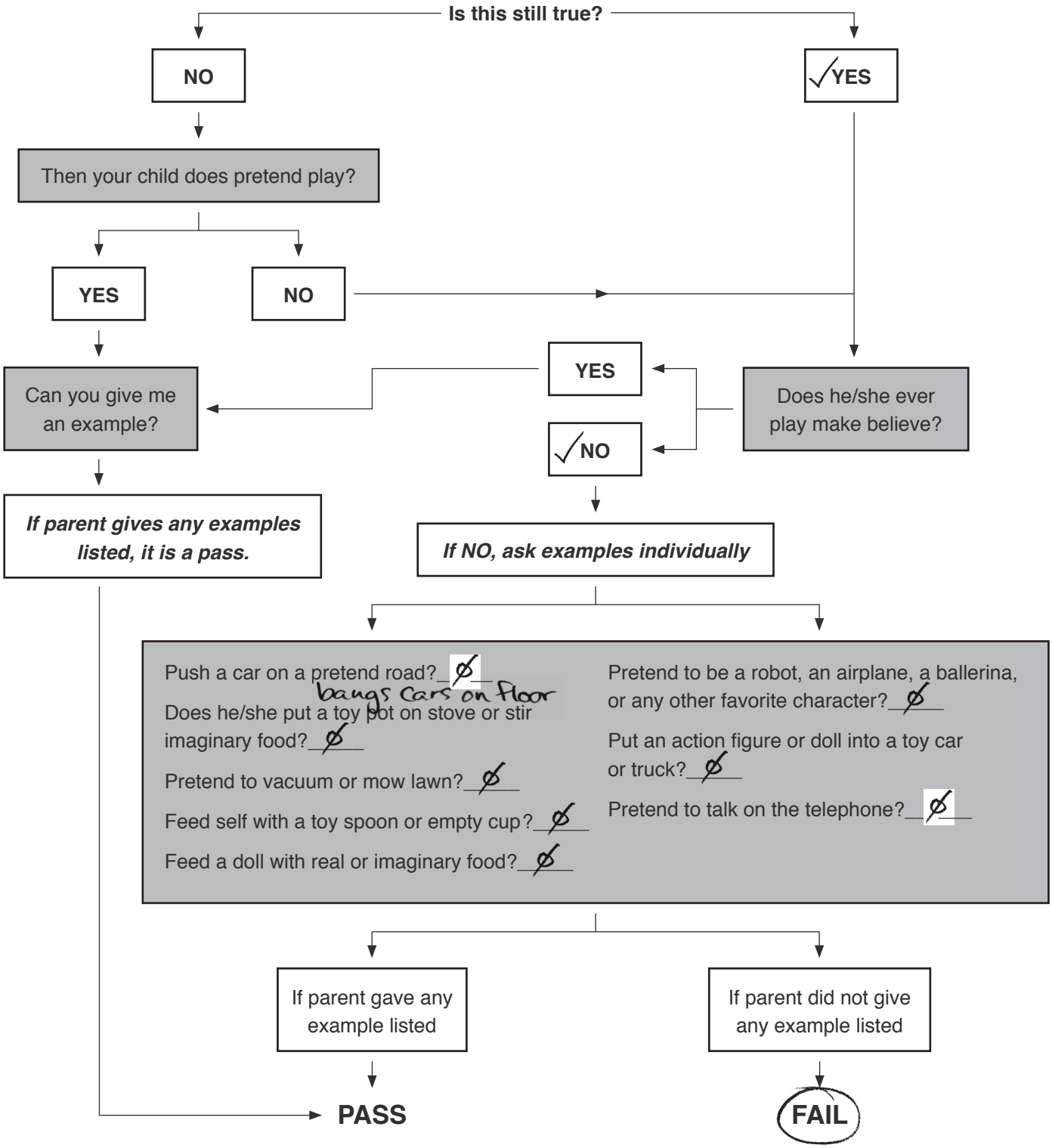


Handout IX: M-CHAT Follow-Up Interview for Claudia :30

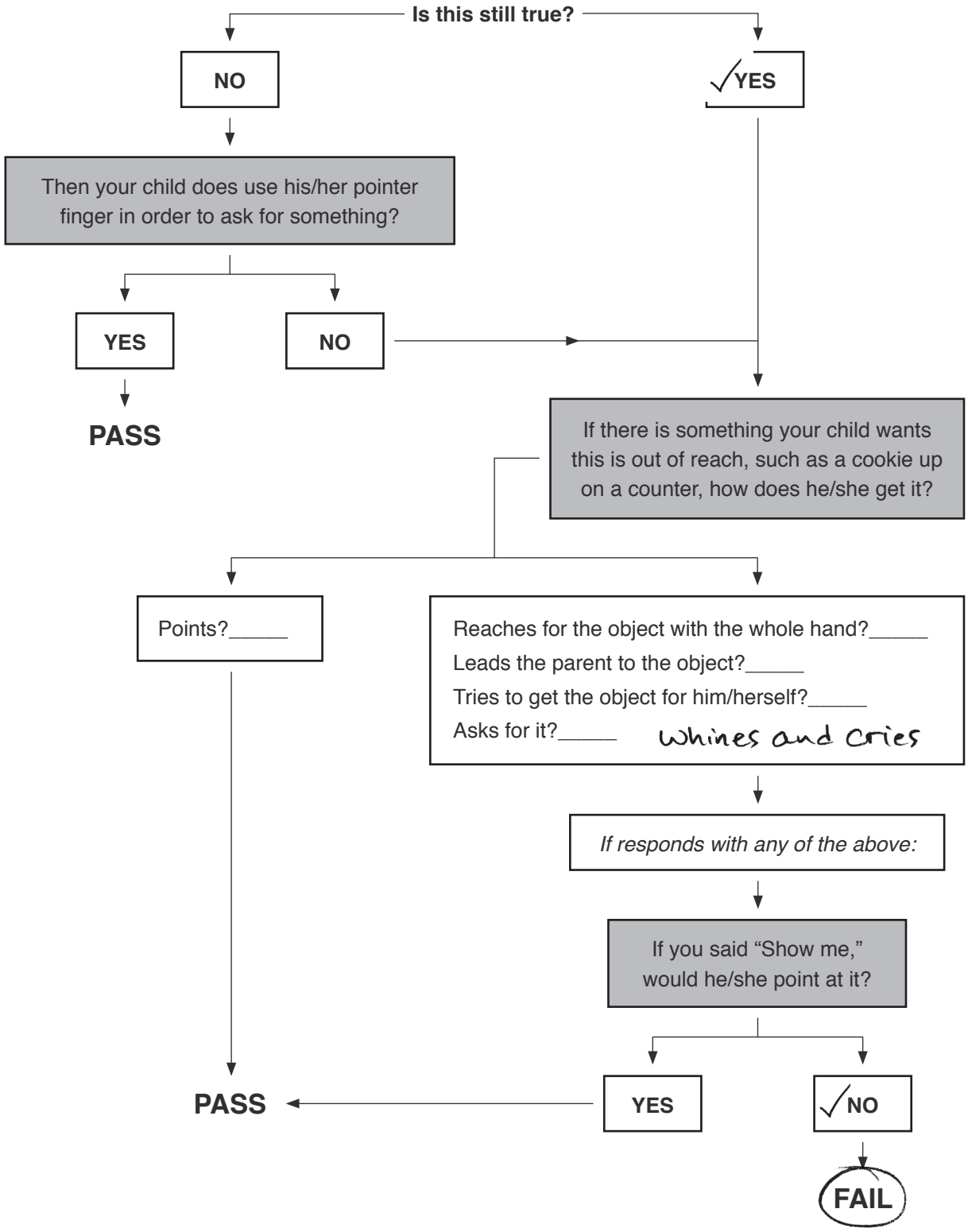
2. You reported that Claudia does not take interest in other children. (Critical)



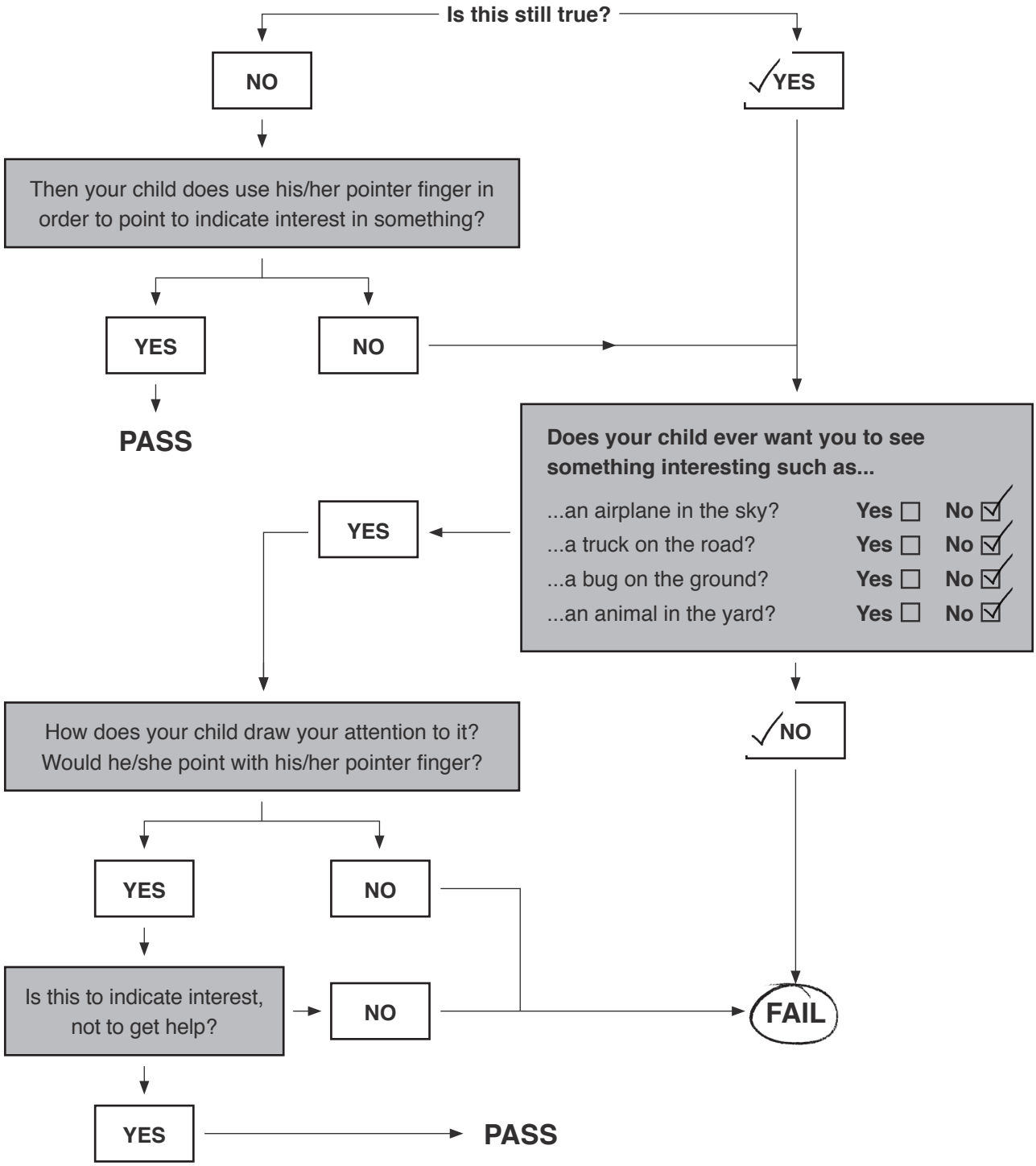
5. You reported that Claudia does not ever pretend, for example, to talk on the phone or take care of dolls, or pretend other things.



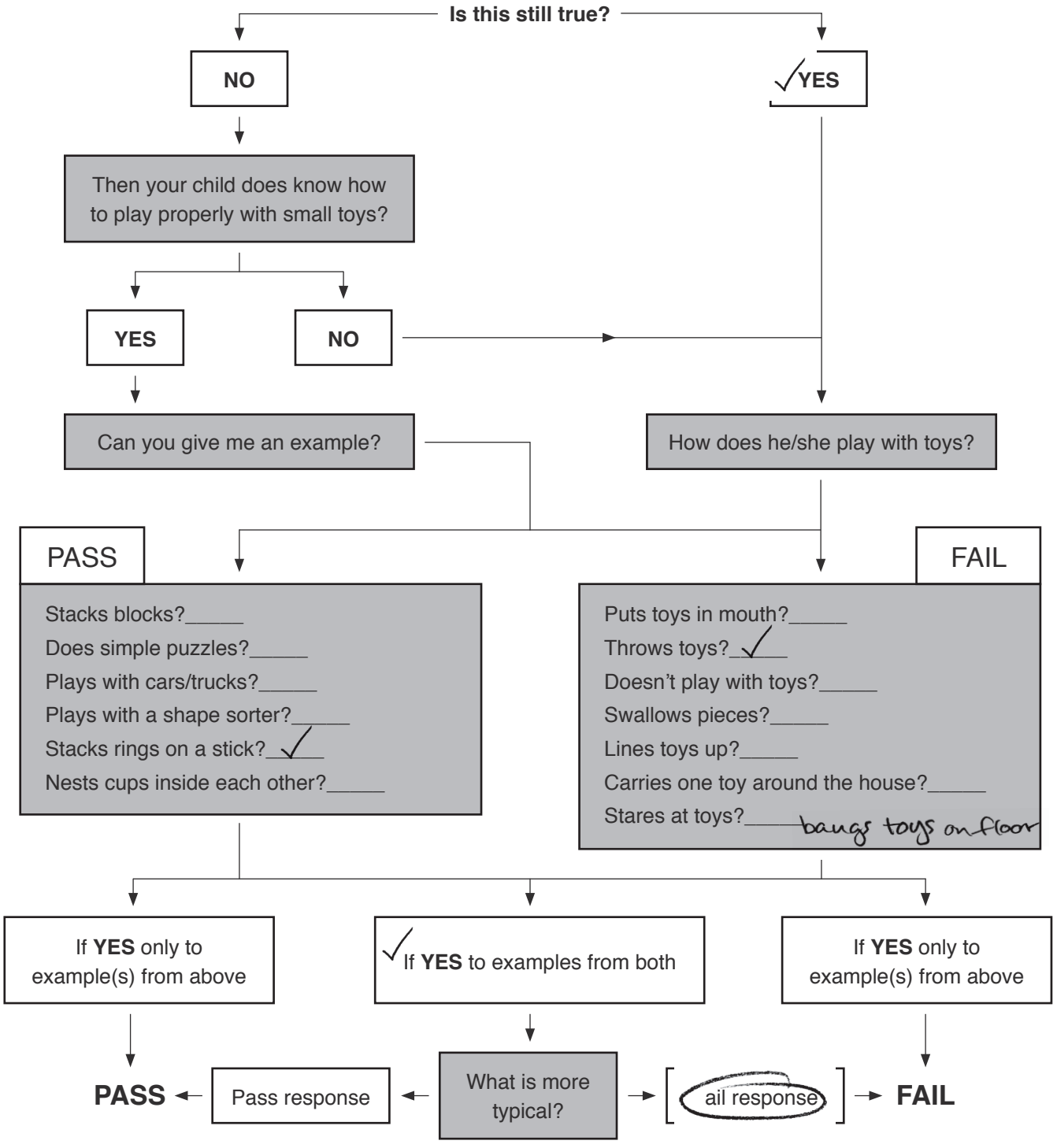
6. You reported that Claudia does not use his/her pointer finger to point, to ask for something.



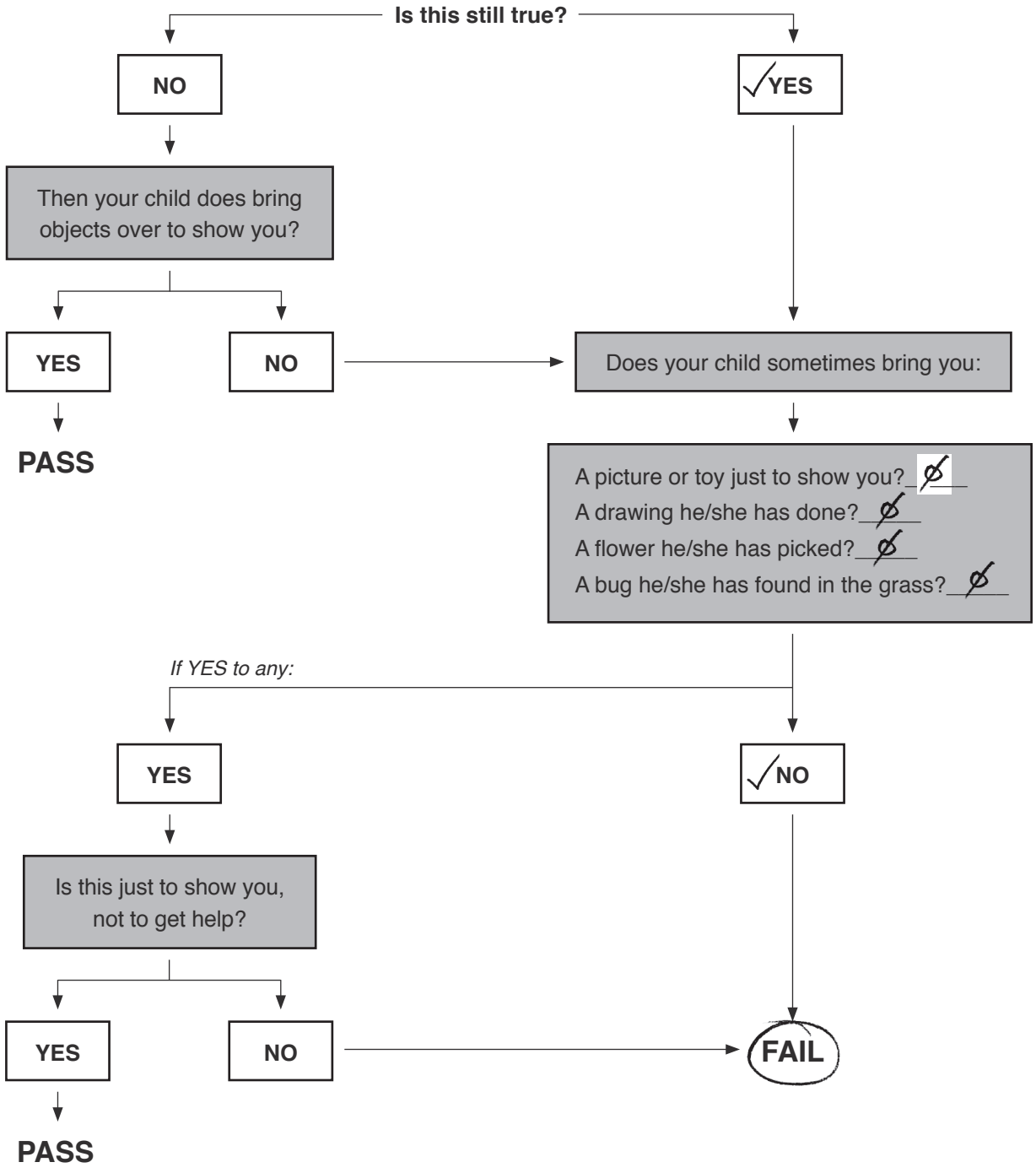
7. You reported that Claudia does not use his/her pointer finger to point, to indicate interest in something, (Critical)



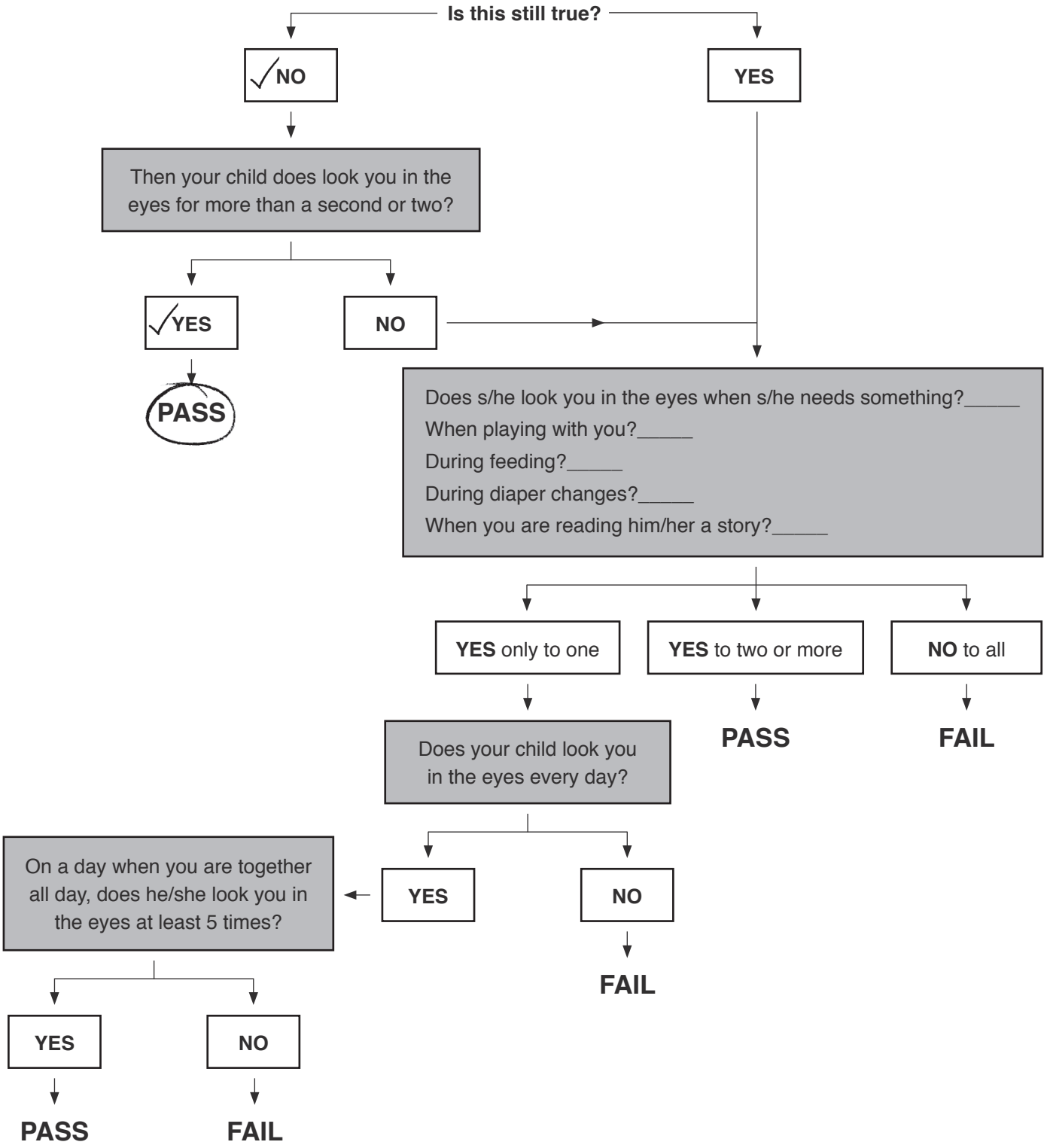
8. You reported that Claudia does not play properly with small toys (e.g. cars or blocks) without just mouthing, fiddling, or dropping them.



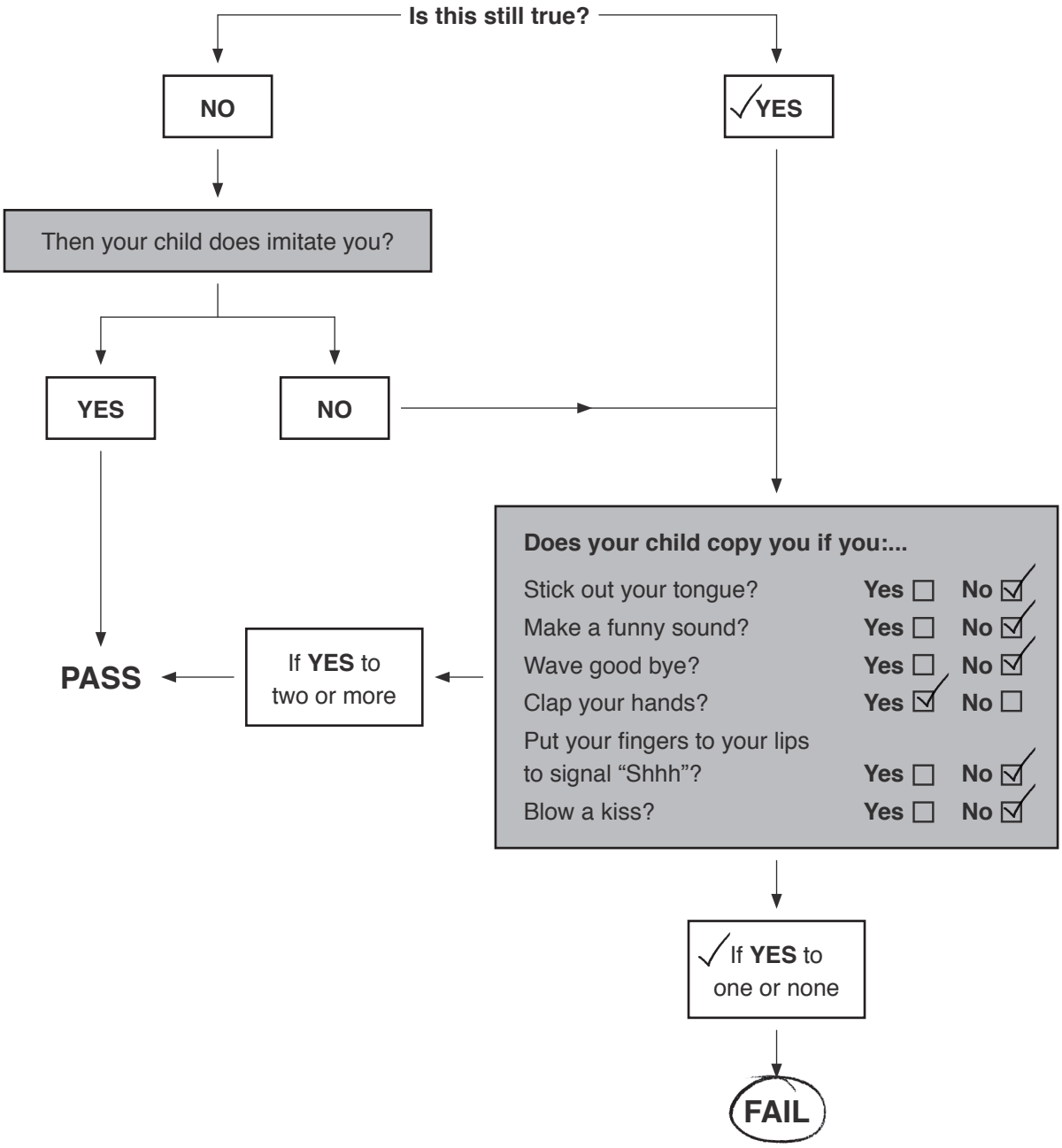
9. You reported that Claudia does not bring objects over to you (parent) to show you something. (Critical)



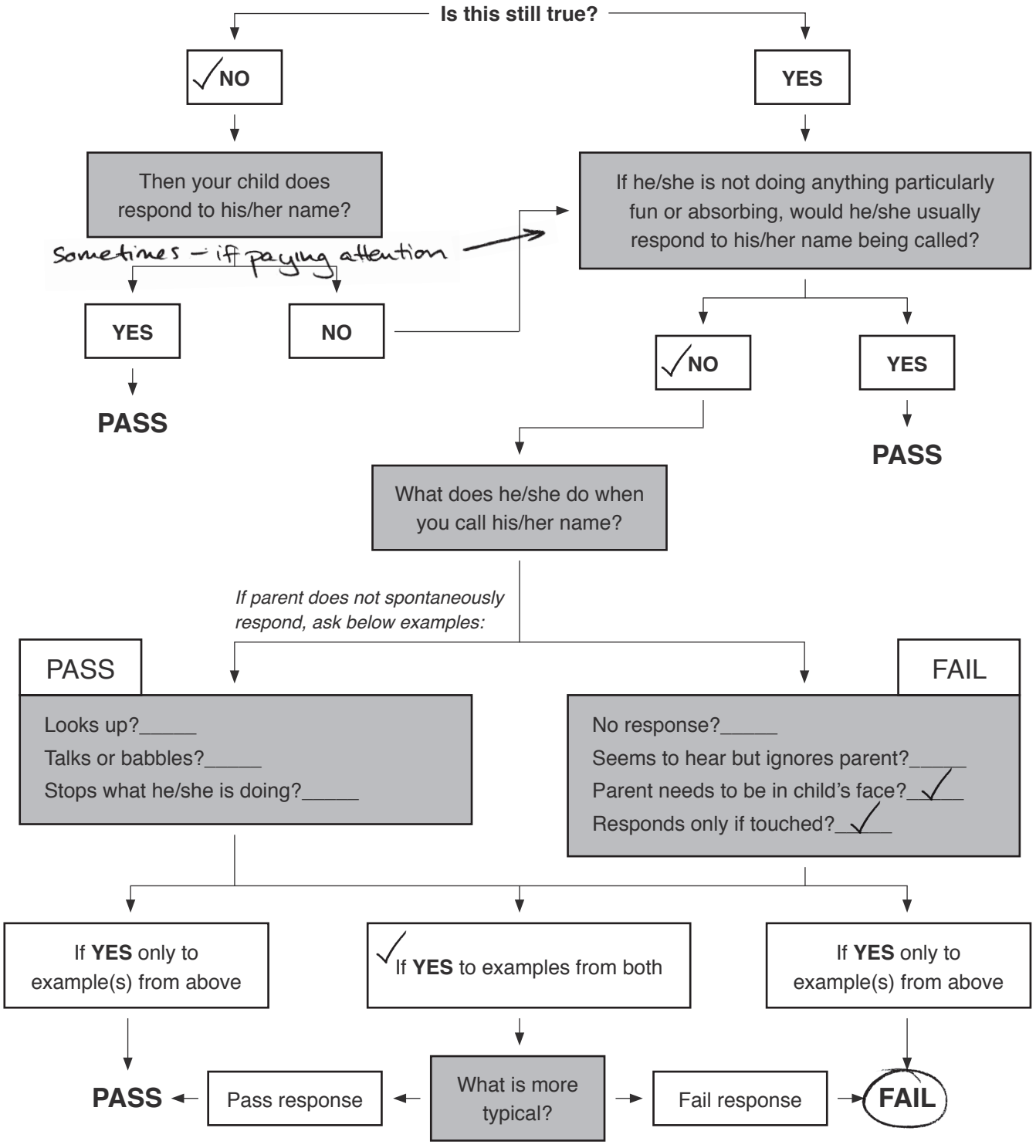
10. You reported that Claudia does not look you in the eye for more than a second or two.



13. You reported that Claudia does not usually imitate you. (Critical)

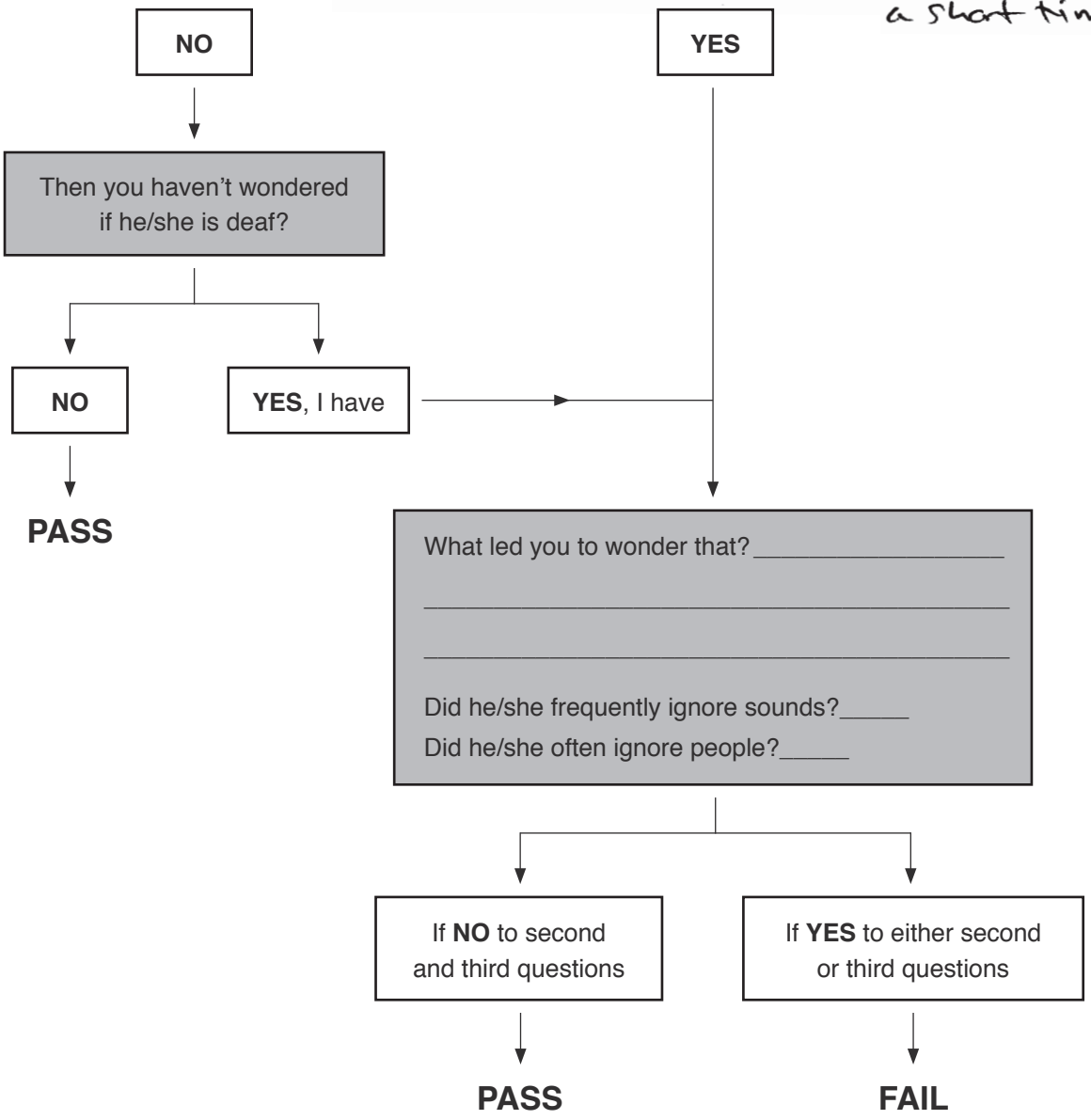


14. You reported that Claudia does not respond to his/her name when you call. (Critical)



20. Have you wondered if your child is deaf?

Claudia's dad was unsure of this answer – claudia has only been living with her dad a short time



Ask all parents:

Has your child's hearing been tested? *If YES*, what were the results?

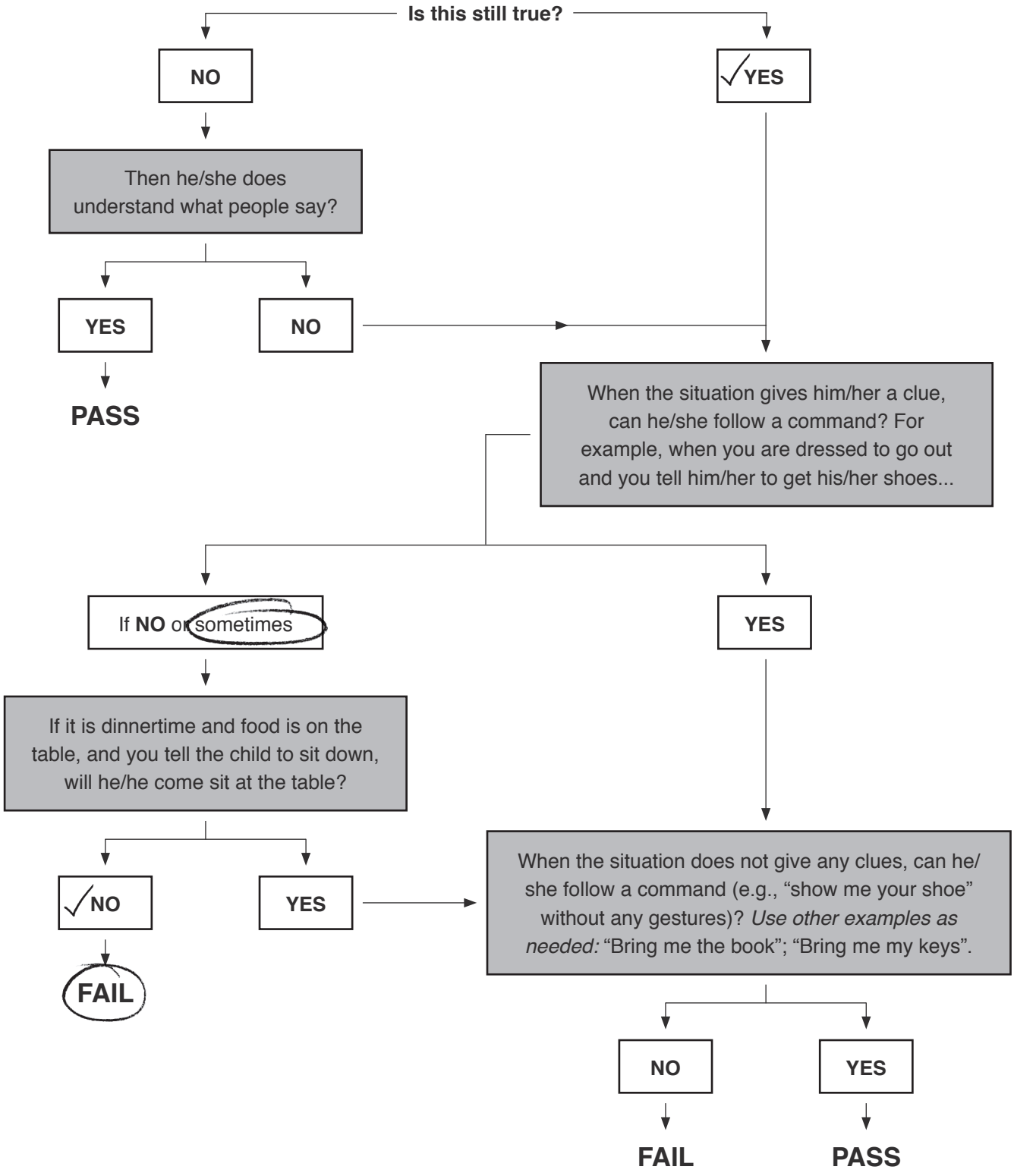
Note results: _____ Hearing impaired _____ Hearing in normal range

- If hearing is impaired > PASS

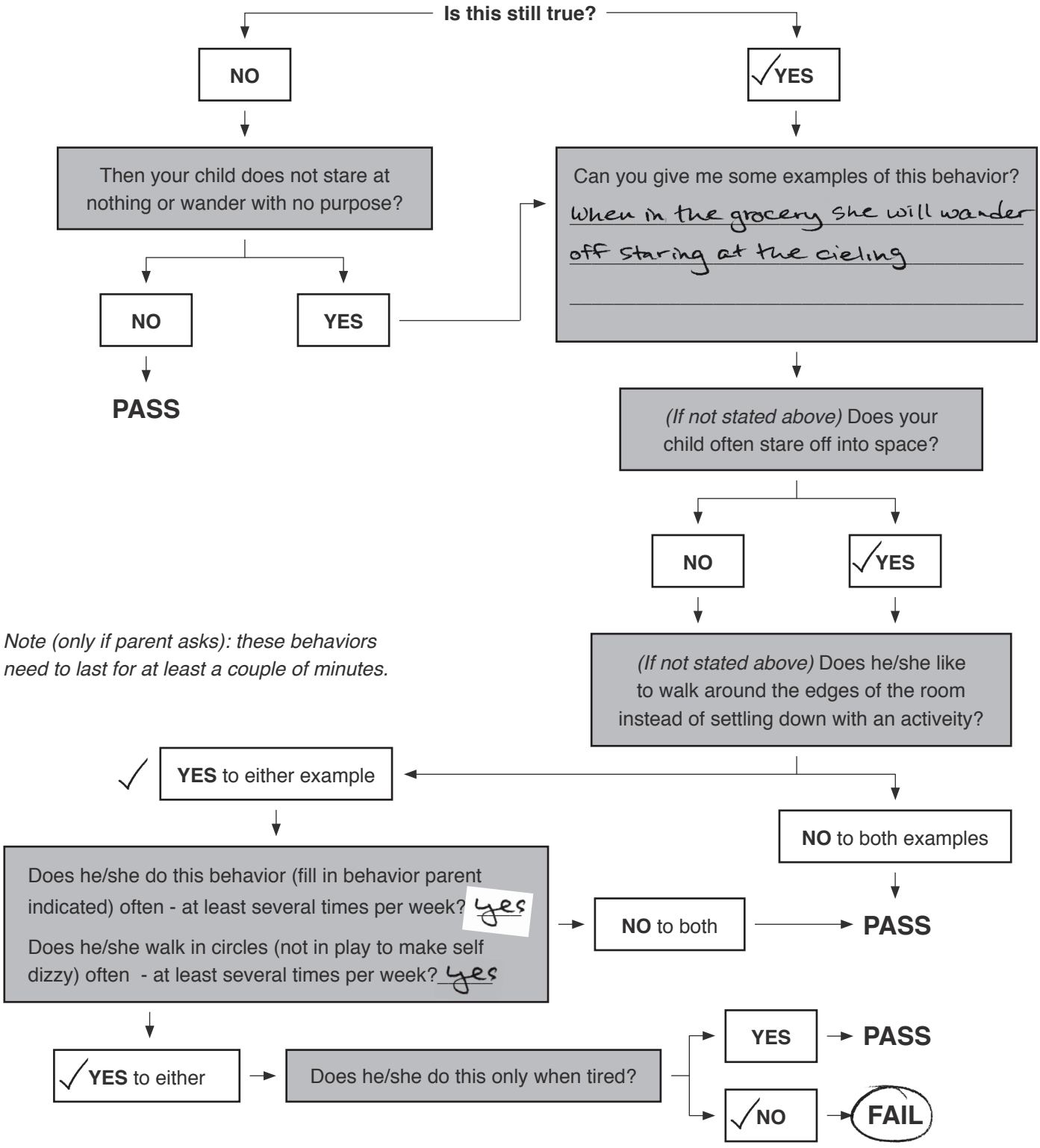
- If parents report that they wondered about their child's hearing only as part of a routine checkup > PASS

- Regardless of hearing test results, if child ignores sounds or people > FAIL

21. You reported that Claudia does not understand what people say.



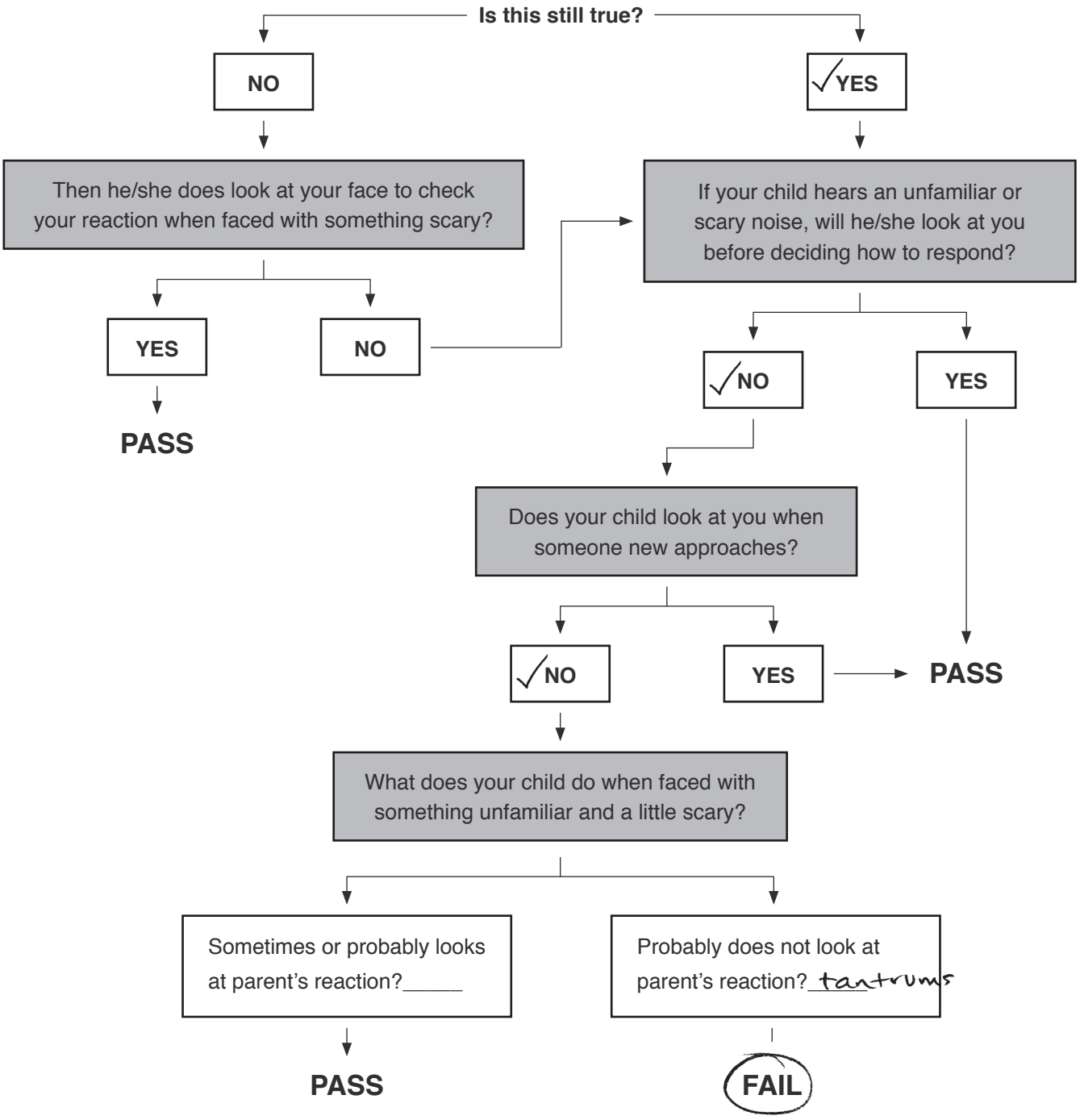
22. You reported that Claudia sometimes stares at nothing or wanders with no purpose.



Note (only if parent asks): these behaviors need to last for at least a couple of minutes.

Claudia's dad was unsure of the answer to this question

23. You reported that Claudia does not usually look at your face to check your reaction when faced with something unfamiliar and a little scary.



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